The **future** of **electronic entertainment** issue#93

EDGE®

PlayStation PS2 N64 Dreamcast PC XBox GameCube

Exposed: Dreamcast's underground pioneers
Previewed: Starpeace, Airtrix, Metal Gear Solid
Reviewed: Skies Of Arcadia, Banjo-Tooie, Final Fantasy IX
Plus: Twisted new tales of development hell

The aftermath

Emerging from the wreckage of Sony's launch, where now for the black box?

Do you need a new television? Probably not. It's likely that your existing set will fulfil your viewing needs for the next five years or so. How about a new DVD player? No, unless it seriously malfunctions it's safe to say that your current unit won't need to be replaced for some time yet. This is obviously because the functionality of these two entertainment devices will not change in the coming years. Not so the videogame technology in your household, though. Unlike visual-display and content-playback hardware, this element has not stabilised since its inception 25 years ago, and nor is it likely to in the next 20.

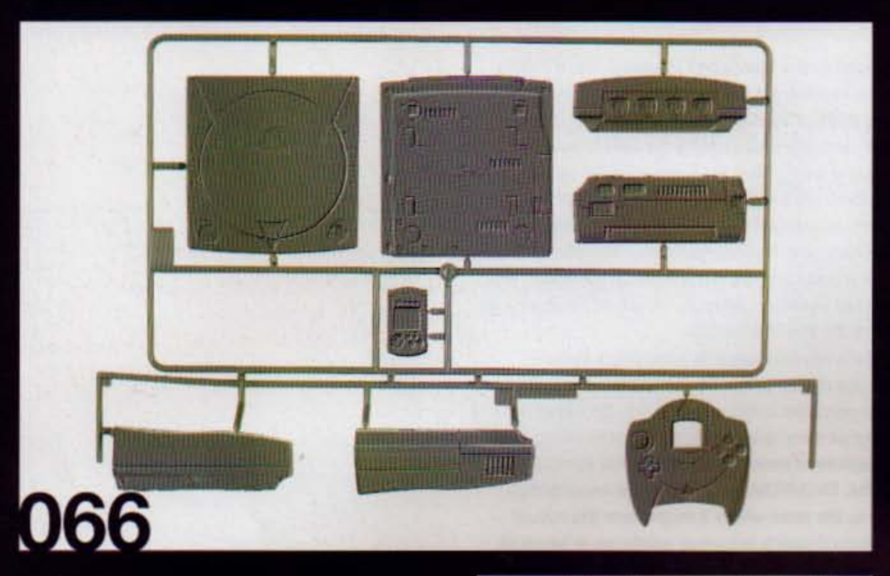
Sony took a big step towards providing a super-durable gaming device when it delivered the first European PlayStation2 consoles in November 2000. On paper the unit is all things to all men: graphically ahead of anything else out there; capable of handling various forms of media (CD, CD-ROM, DVD-ROM, etc); and, most importantly, expandable to the point where it might form the hub of Johnny Housing Estate's suburban existence in terms of what he does after a hard day at work, be that view downloadable movies, upload pictures of his family in order to send them to relatives, or – heaven forfend – play games.

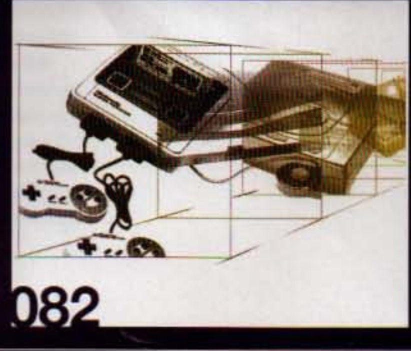
Sony's plans for PlayStation2 are brave. Its rivals would no doubt term them outlandish. Regardless, when any company or individual sets out such an ambitious stall, it must be prepared to answer to its critics when it does not meet requirements. This month **Edge** looks into the Euro PlayStation2 launch in some detail (see p8), identifying what went wrong with the rollout of the most anticipated piece of hardware in western videogaming history.

Coincidentally, one of this month's features, 'The generation game' (see p82), recounts the previous round of console wars from the mid-'90s, and sees Nintendo dropping all manner of clangers with its drive towards dominating an industry ruled by the march of technology.

With the videogame hardware equivalent of the VCR remaining a dream as remote as it ever was, in the meantime you should be enjoying the likes of *Skies Of Arcadia* (see p92) and *Sin And Punishment* (see p102) – two titles for 'old' consoles whose engineers would surely not have imagined they were building technology even remotely safe from the hardship that progress dictates.

Features





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The Future Network is a public company quoted on the London Stock Exchange.

Bath London **Milan** Munich
New York Paris **San Francisco**

Printed in the UK

ABC
(Audit Bureau of Circulation)

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Colour reproduction
Pre-Press, Bath Phoenix Repro, Bath

directory december

the aftermath issue

Regulars

Prescreen

Testscreen

Print
Cradley Print, Warley, West Midlands

Production of Edge
Hardware: Power Macintosh, G3, G4 Cube, i-Book, iMac
Software: *QuarkXPress*, Adobe *Photoshop*, Macromedia *FreeHand*, and Nisus *Writer* **Typography:** (Adobe®) Helvetica [illegible], Light, Roman, **Medium**, **Bold**

Thanks to Cathy Campos at Panache PR

"I can do anything, I'm the chief of police"

frontend

News and views from e-entertainment's cutting edge

Euro PS2 hits ground stumbling

A muted second coming greets Sony's next-generation dream machine as the company delivers just 80,000 of the promised 165,000 preorder units

While it came with a whimper rather than the expected bang, the fallout from the controversial preorder system meant that PlayStation2's European launch was always going to be a difficult PR event for Sony. Of the allocated 165,000 preordered units for the UK, only around 80,000 were received in time for the console's November 24 debut. Sony could not guarantee the arrival of the remainder of the hardware allocation in 2000. "We're hoping that the second shipment will arrive before the end of the year, but realistically we're looking at the beginning of 2001," says **Dave Wilson**, head of UK public relations for Sony Computer Entertainment. Across Europe Sony claims a launch ship-out of 300,000 units, with the next shipment promised as 500,000. In the UK, 93,000 software sales were recorded over the first two days.

Even for those gamers organised or lucky enough to have received their confirmation letter from Sony, there was little of the razzmatazz expected from the launch of a major game console. Of the major retailers, only Electronics Boutique attempted to put on a show. One hundred EB stores around the country opened their doors at 10:30pm on November 23, allowing gamers the opportunity to demo some of the launch titles. "As the leading specialist retailer, it wasn't just important for us to guarantee those people who preordered a machine for launch to get one for the 24th. There were customers who wanted to collect it at midnight so they could take the day off work and play from the minute they got out of bed," said **Lisa Morgan**, EB's commercial director.

UK launch a quiet affair

In central London, the lack of an official Sony launch event proved to have some interesting implications for the national media, hungry for footage of the PlayStation2 feeding frenzy. With EB's Oxford Street store the only local news opportunity, the 60 or so punters who arrived to pick up their machines found themselves in a media scrum with five TV crews and a range of assorted magazines and Web sites on hand to record their joy. One priceless moment saw a Japanese film crew trying to persuade people to queue outside the shop so appropriate footage could be filmed for a news bulletin.

"There were customers who wanted to collect their PS2s at midnight so they could take the day off work and play from the minute they got out of bed"

PS2 top ten

Launch weekend sales figures for PS2 software in the UK

1 **Tekken Tag Tournament** 19,500
2 **TimeSplitters** 13,500
3 **SSX Snowboarding** 11,600
4 **FIFA 2001** 11,500
5 **Ridge Racer V** 8,500
6 **Silent Scope** 7,500
7 **ISS** 5,500
8 **Smuggler s Run** 4,500
9 **Ready 2 Rumble 2** 3,500
10 **Orphen** 2,500

Source: Chart Track/MCV

In central London, Electronics Boutique attempted to put on a show. The outcome was twofold: consumers felt like they were part of an event, while the media had its long-awaited western PS2 sales story

A slightly bewildered-looking Afro Thunder joined Chris Deering at the London launch

There were similar levels of apathy on Internet auction sites in the days which followed the launch of the unit. Some optimistic entrepreneurs have been charging up to £1,500 on Ebay, for example, but as **Edge** went to press, the highest sale was for £495, with similar prices on other sites – in sharp contrast to the wild speculation at US launch.

UK publisher Rage took full advantage of the low-key nature of the launch to promote its *Wild Wild Racing* title. A VW Beetle toured the country complete with an entourage of blonde beauties and a cigar-chewing Wild Wild Racer. Free T-shirts were handed out, and Rage's efforts were suitably rewarded when Lee Bottomley, the first person to pick up his PlayStation2 from EB's Oxford Street store, happily posed for the waiting media with a copy of the game. Afro Thunder was also on hand to promote Midway's *Ready 2 Rumble: Round Two*: "I want my PS2. If PlayStation don't get their act together, someone's going to have to call a doctor." The onlooking Chris Deering, president of Sony Computer Entertainment Europe smiled, but wasn't saying anything.

"It has been very challenging – I won't deny that," admits Morgan, when asked about Sony's preallocation system. "But as preorders are something that we've been doing for years I think that our stores managed the process incredibly well. At the end of the day, we have bee[n] guaranteed that we will get all we were allocated back in September because we were all sold out, which again I know wasn't always the case elsewhere."

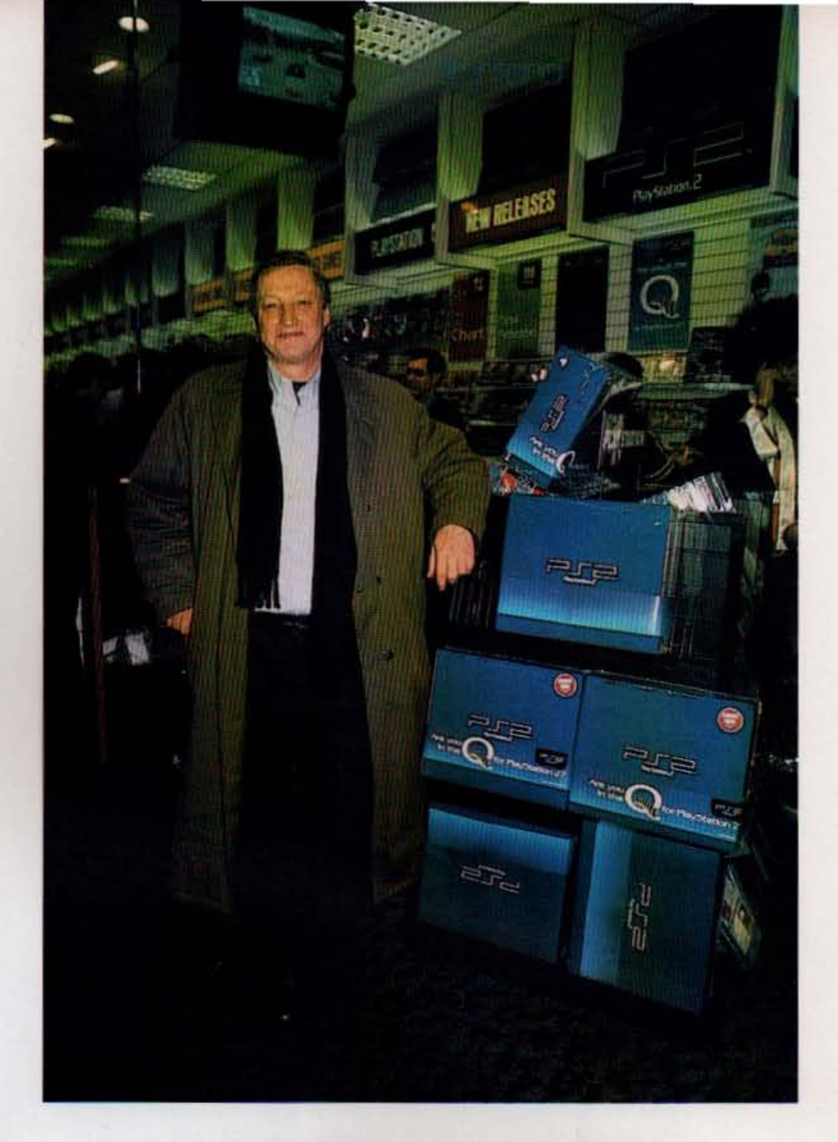
French fight for a PS2

At least the UK was spared the riotous scenes that greeted PlayStation2's launch in Paris. AVIs of the chaos were still being circulated around Sony's European HQ a week later. "The preorde[r] process wasn't a smooth ride, but when I saw TV footage from Paris of people fighting to get stock, I felt avoiding

The launch software ranged from the below-par (Activision's *Orphen*, above left), to the mediocre (Namco's *Ridge Racer V*, above), to the proficient (Konami's *Silent Scope*, left). It was a mixed bag, and early software sales figures certainly reflected that

The presence of a thirdpary game character gave the launch an almost Sega-esque feel. Without queues, the launch lacked the buzz usually associated with Sony glamour, too

Despite limited available PS2s, some stores have already relegated Dreamcast displays to less prominent positions, which should put a smile on the SCEE president's face



"The preorder process wasn't a smooth ride, but when I saw TV footage from Paris of people fighting to get stock, I felt avoiding those scenes made the scheme worthwhile"

those scenes alone made the scheme worthwhile," ventured SCE's UK marketing manager **Ray Maguire**.

There has been something of a media backlash against Sony, however. "Sony say there's a lack of key components but are they hyping their console by rationing it?" asked a report on the BBC lunchtime news the following day. Consumer programme 'Watchdog', which earlier in the year tarred PlayStation2 with its 'Rip-off Britain' brush, phoned **Edge**, eager for titbits.

In part, though, this sniping is only a product of Sony's domination of the games market. By the end of its financial year, Sony expects to have shipped three million PlayStation2s outside of Japan. More ambitiously, it also expects to sell more PlayStation2s than the original PlayStation, which currently boasts an installed base of 76 million.

PS2 DVD difficulties

However, there have been genuine problems with the UK launch. Given that the unit's integral DVD functionality has arguably been a key factor in driving sales, it was surprising and infuriating for punters to find the DVD playback on their PS2 less than stellar. Using a SCART RGB cable to watch DVDs on PlayStation2 produces a green image, and while there is always the option to use an S-VHS or composite cable, many consider the RGB signal to provide the best-quality image. While Sony attributes the problem to anti-piracy measures, which prevent users from recording DVDs onto VHS, it is more likely that the company's own copy protection software – used in lieu of the DVD standard, Macromedia – is to blame.

Meanwhile, the scarcity of PS2 units has, inevitably, resulted in the more opportunistic sector of the criminal fraternity swiftly taking advantage of the situation. ELSPA has already warned consumers to be on the lookout for counterfeit goods. "The demand for the console and associated games has been tremendous," noted **Terry Anslow**, chief

The first wave of PS2 owners deliver their verdict on the launch

Name: Yusuf
What games are you going to buy? *Tekken Tag*, *TimeSplitters*, and *Silent Scope*.
When did you place your preorder? The first day.
Has the preorder system worked? I don't know, as I got a friend to pre-order for me.

Name: Stephen
What games are you going to buy? *FIFA2001*, *Silent Scope*, and a few others
When did you place your preorder? The first day
Has the preorder system worked? I like it because I'm getting one, but I'm sure there are plenty of people who hate it

Name: Ian
What games are you going to buy? I've got an F1 game on order, but I don't know if it's in yet, and I'm waiting for *Dead or Alive 2*
When did you place your preorder? September 7
Has the preorder system worked? It worked for me but ideally they would have plenty of machines

Name: Stuart
What games are you going to buy? *SSX*, *Silent Scope*, and *Ready 2 Rumble 2*
When did you place your preorder? I preordered through Virgin. I'm just picking up games
Has the preorder system worked? It means I don't have to stand around for hours and hours

Launch software sales figures were more or less directly proportional to the profile and/or marketing budget of each title. Thus, games such as (anti-clockwise, from right) *Smuggler's Run*, *Tekken Tag Tournament*, *Fantavision*, *TimeSplitters*, and *ISS* received wildly differing receptions. Some of the smaller numbers were humble indeed

"The games that came out with the system were written fairly conservatively in order to achieve a launch date, rather than any technical evolution"

investigator for the ELSPA crime unit. "Unfortunately the counterfeiters have decided to cash in and the market is quickly flooding with bogus copies." The software, which was on sale for up to £30, apparently doesn't run on genuine consoles. Other reported incidents included criminals fleecing consumers by offering units that they didn't have and disappearing with consumers' money.

Launch sales figures acceptable

But despite letters that **Edge** received from unhappy customers who have already returned their PlayStation2s, software sales indicate a successful launch, despite the apathy engendered by the preorder system. According to ELSPA, PlayStation2 software sales were 15 per cent greater during the weekend of launch than Dreamcast software sales when it launched last year. Given that Sony sold approximately 15 per cent more consoles at launch than Sega, the software-to-hardware ratio is more favourable than is the case in Japan, and indicates that while DVD playback is attractive to early adopters, it hasn't yet affected software sales. Certainly Dreamcast software sales over the week of the PS2 launch were just one third of PS2 sales over the weekend alone.

Nevertheless, with the console's global launch finally complete the issue for Sony now is ensuring the quality of PlayStation2 software. "The games that came out with the system were written fairly conservatively in order to achieve a launch date, rather than any technical evolution," comments Sony's **Phil Harrison**. Harrison, who until recently was vice president of thirdparty relations in America has returned to Europe to head up Sony's internal development teams. "The hardware is so varied that it is scary to some people, but it's good from a consumer point of view because it means the games will get better and better as time goes on," he claims. But it is still not clear that *Gran Turismo 3* will offer substantially improved gameplay over that of its predecessors, and few details have emerged yet regarding the playability of *The Bouncer* – although with the Japanese release date set for the end of December more details should emerge soon. More worrying are rumours that SCEI is rushing the development of *Dark Cloud*, one of the titles that Harrison argues will demonstrate the true potential of the console, due to concern over the imminent Japanese arrival of GameCube. With Microsoft's X-Box also set to enter the console space soon, *Metal Gear Solid 2* still seems the best indication of what can be achieved with Sony's black box. The problem – which needs to be remedied quickly – is that it currently stands alone.

Name: Neil
What games are you going to buy? *Silent Scope*, *SSX*, *FIFA 2001*, and *TimeSplitters*
When did you place preorder? Five weeks ago
Has the preorder system worked? I think EB have been really poor, but Sony have been brilliant

Name: George
What games are you going to buy? *FIFA 2001* and *SSX*
When did you place your preorder? The first day
Has the preorder system worked? I was all right, but I never got my first letter from Sony

Name: Tyrone
What games are you going to buy? *ISS*, *Silent Scope*
When did you place your preorder? First day
Has the preorder system worked? If everything goes right tonight, it will have worked

Name: Adam
What games are you going to buy? *ISS*, *SSX*, *Tekken Tag*, and *TimeSplitters*
When did you place preorder? September 7
Has the preorder system worked? I think it has worked. It's all been pretty painless

industryopinion

Edge asks the industry for its views on the PS2 launch

"I don't know why anybody cares about the launch, really; they have outsold the original PS launch, does that mean they will outsell the PSone over the long term? No. Does it mean anything? I don't think it means a damn thing. The PlayStation2 is in that phase were the hardcore tech-heads must have it and nobody else is much interested until the prices drop and the software hots up.

"One interesting aspect was Chart Track showed less software sales than the number of hardware units shipped. I think this shows more about Chart Track's inability to accurately show software sales by independent retailers than it does about sales of PS2 games, however. It would have been amazing to get a million PS2s on to the shelves day one, and have them all sold out. But imagine what an outcry there would be from the gamebuying public when they had the hardware and found there was only one game worth buying.

"The slow trickle by Sony is probably very deliberate, and I think much less damaging than shipping huge numbers without the software to back it up. Incidentally, picking up a PS2 at retail is easy if you're prepared to pay £450 per machine, as a lot of retailers are importing from the rest of Europe, which seems to have been over supplied with PAL systems then selling them on at a big profit."

Mike Diskett
Mucky Foot

"Anyone who has seen the widely publicised scenes of French fans practically rioting to get hold of a PS2 would have trouble denying that the PS2 has arrived with a bang. Supply shortages and preorder ambiguity have tarnished this to a certain extent, but memories of these will fade fast amidst the almost rabid media frenzy that has accompanied the launch. Sony has successfully given the PS2 the momentum it needed to step into its predecessor's shoes, now if it can just capitalise on its captive audience by shipping units in to retail, its dissenters will quickly come around. I guess time will tell if arthouse shorts sell game consoles."

Vince Farquharson
Synaptic Soup Ltd

"The PS2 launch so far is only really to the 'early-adopter' brigade – and most of those will have had preorders in long ago – it is a shame that Sony couldn't get more units produced for Europe. Because of this, the Third Place campaign is sensible – it is a case of building awareness and image as (at least as far as I know) there are few if any PS2 units available for sale before Christmas anyway. The most serious effect is on publisher confidence, particularly in Europe. Many publishers (and developers) have been hurt by the low sales levels the last few months because of PS2 anticipation, but the PS2 titles cannot do very well either because of the lack of machines. Does this mean Microsoft and then Nintendo will have the same Europe Last policy, too?"

David Braben
Frontier Developments

"I don't think that there was ever a doubt about Sony's ability to shift its first shipment of PS2s. Given that it was a successful launch, there should not be any strategic reasons for wanting to do things differently. I believe that Sony could have doubled the day one shipment and even doubled the launch price, and still been able to sell out just as fast. The relevance of the marketing campaign to the first shipment was minimal, although it will increase in importance as PS2 sales move from early-adopter to mainstream. It was interesting to note that online ordering was not promoted here as much as it was in Japan – where Sony took considerable business away from retail."

Nick Gibson
Durlacher

"From a hardware perspective the launch has been incredible. From the software side, which is what I do, I feel sorry for all of the teams who have to rush titles to market. Having said that, EA have done a blinding job in the time available. I don't know what more could be done in terms of providing the hardware. Every unit that has been made has been sold, as far as I know. The demand is incredible, which is really exciting if you're making PS2 games. Software-wise, we need better libraries from the word go. If you are going to have a radically different architecture, then you need more time and more working code for people to come to terms with the hardware. It's one thing to promise an exponentially better gaming experience, and then provide six to 12 months time to market and non-existent libraries. The two don't add up. As a company we have to learn from this."

Brendan McNamara
SCEE

"They sold all the units that came into the country, so in those terms it was successful. People in the street know about it – people see it as an elusive, desirable thing. I don't know what percentage of sales are from impulse buys, but obviously they're not going to get any of that. I don't know about the Third Place; I've got a lot of respect for David Lynch, but I'm not sure that advert is the most appropriate thing for the target audience. The UEFA Champions League sponsorship is much more relevant. I still think it's going to be big long-term, but if it's not in the shops, people can't buy it."

Jeremy Longley
Lost Toys

"They could have shipped more units into the market, obviously, but other than that, they've created the market hype that I think everyone expected them to create and sold all the units. The best thing is definitely that the ratio of software to hardware sales I think has been pretty good – it could have been worse if you look at Japan. People are buying it as a game machine, which I think is a good thing. The marketing hasn't really needed to kick in yet. PlayStation2, like PSone before it, is going to be a really massmarket product, and at the moment they've been trying to do that 'early-adopter' awareness, which is good because it makes the machine cool, but I don't think they've tried to reach the super-massmarket because they haven't got the stock. I'm pretty happy with what they've done. Certainly there's a good buzz around PlayStation2 now, and that's exactly what they needed. I think the long-term issues really centre around how quickly they can ramp up delivery, what the pricepoint is over time, and, obviously, how good games there are. Short-term there probably was some frustration, but it's definitely an early-adopter market at the current price."

Ian Baverstock
Kuju Entertainment

"The UK PS2 launch has been a disaster for many retailers. Currys in particular blew it with no preorders fulfilled at all. Customers seem to be directing their anger at retailers and not Sony, who are clearly responsible. Preparation, outsourcing, and keeping customers informed has paid off for us. Not only have we fulfilled all our preorders, but there will soon be units for sale on our Web site. Customers were weeping with joy when they were guaranteed a PS2 within two weeks of Sony's UK launch. We phoned every customer who ordered a PS2 with us before launch date to tell them what date to expect their machine in order to defuse the situation on launch date."

Andy Tucker
Cex.co.uk ecommerce operations

Sega's strategic rethink

Clear water opens up between Sega of America and Sega of Japan as parent company engineers a tactical withdrawl from hardware

Sega of Japan's shift in business strategy towards providing online content has not gone entirely smoothly if an article in Japan's leading financial newspaper listing Sega as the least profitable company in the country is anything to go by. Although the situation for Dreamcast does not seem as dire in the UK, with PlayStation2 shortages over Christmas set to give Dreamcast sales a fillip, the real Sega heartland is undoubtedly the US. **Edge** spoke to the president of Sega of America, **Peter Moore**, to find out how he sees the company's shift in strategy.

"Dreamcast has already managed to sell 2.5 million units in the US, and we expect to have around four to five million units sold by March 31," states Moore, outlining figures that Sega of Japan would kill to be able to announce. "I really think we will do very well this Christmas for several reasons, including the PS2 components shortage. On the software side, we've just released *Shenmue*, and it appears to be one of the biggest non-sport title launches ever on the format. *Jet Grind Radio* is also scoring great results at the moment."

So why isn't Sega of Japan looking forward to such a rosy Christmas? "We focused from the start on the videogame aspect of the machine in the US," points out Moore. "We knew we had several weak points, especially if you consider that EA was not willing to develop on Dreamcast, which meant we had to come out with our own sport games solution. We did it and it played an enormous part in the Dreamcast success in the US. In Japan, Dreamcast has been promoted as a multimedia machine, and I don't think that was the best approach – as current sales demonstrate."

"I really think we will do very well this Christmas for several reasons. We've released *Shenmue*, and *Jet Grind Radio* is scoring great results"

Focus on the Internet

Instead, Sega of America focused on introducing the Internet capabilities of the unit when it was able to support them with quality software. "We have promoted Dreamcast's online capabilities as we have introduced more online compatible titles like *Quake III Arena*, and we are currently preparing to launch *Phantasy Star Online*, which is the first true online gaming experience on console ever. We are very excited about it. I understand that Japan is far more advanced in the wireless field than the US. So that could explain Sega of Japan's strategy in moving towards becoming an online content provider company," says Moore.

Sadly, initial attempts by the parent company to implement the shift have been less than successful. Although superficially a good idea, the initial rollout of Entertainment STAGE net@ was fruitless, and will be relaunched next spring. @barai, which allows Dreamcast owners to buy a trial version of a game before purchasing a code to unlock the rest of it online, has undergone similar teething troubles. The first title to be available as part of the scheme, *Eternal Arcadia*, was also released as a demo in *Famitsu*, undermining the 'try before you buy' principle. With Sega hoping to introduce videoconferencing and instant messaging to the Dreamcast, how does Moore see the future of the unit's online capabilities?

"If you consider the Internet, a mass storage media has to be considered, since it allows much better applications," he states. "I would like to continue to stress our strong sport line-up. Imagine if you could update sport results into your game using this storage device. It offers many benefits. So, if X-Box offers its own mass storage media, we should have our own. We are not yet decided

Although Sega has not yet confirmed that it will be producing a Zip drive (below), a storage device is under consideration

on which one, but we're still keeping in mind the price issue. When the Zip drive was designed it would have cost the same price as Dreamcast. It was then unrealistic to release such an expensive extension. Now we have reached a good point, and it is becoming viable to release a mass storage medium on Dreamcast."

Peter Moore is unconvinced that SOJ's revised business strategy is applicable in the US, given the huge success of the PC

Moving away from Dreamcast

Sega of Japan has also outlined plans to develop for other hardware platforms. Although the possibility of opening up franchises to other developers, as was the case with the PC Engine, has been outlined, the main strand of its multiplatform development focus has been the Dreamcast chip for PCs. Moore, though, is not so convinced that this is a good idea – at least in the US. "I want to be cautious, since to me it still has to be proven that a Dreamcast in a PC is a viable solution. I don't know very much about the Japanese situation, but in the US – where this platform is quite developed – I don't think it is a profitable market. So, I would not understand this move in the US, frankly. It is true that we are trying to unify console and PC platforms. For example, *Quake* on Dreamcast allows players on both platforms to confront each other, and I think this kind of move is the right direction, even if it is quite a technological challenge." Nevertheless, as he points out, the PC is under threat from convergent devices: "I'm an AOL member, and the company is shifting its business into TV, so I guess set-top boxes will become the centre of family life. So, concerning the Internet, a shift is happening from the bedroom, where the PC is traditionally located to the living room, a community place."

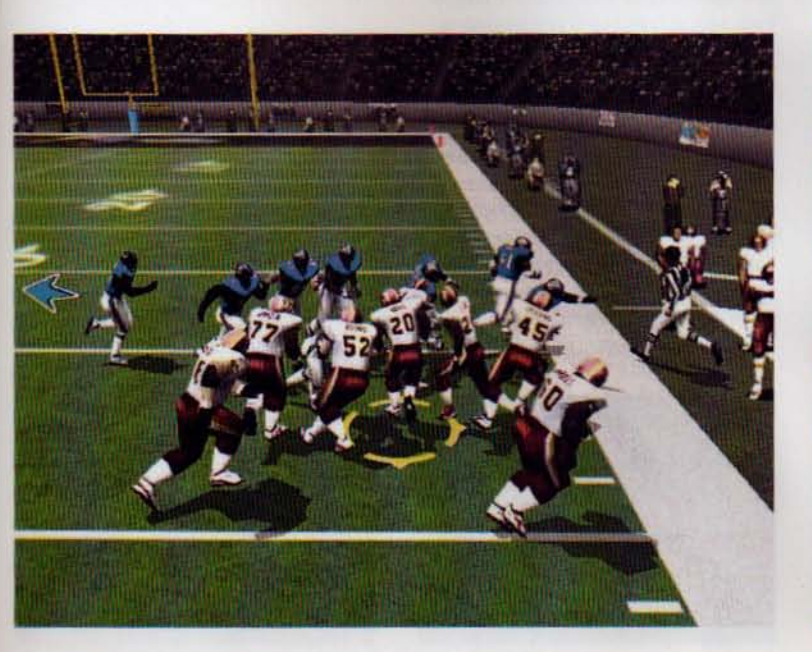
Sega of Japan would certainly do well to take heed of Moore's qualified caution regarding the company's repositioned business strategy, if only because of the success that he has engineered in the US. But as **Nick Gibson**, of Durlacher, points out, the company is merely addressing concerns held by the City: "The shift from console company to online company and software company has been expected for a long time,

"It is true that we are trying to unify console and PC platforms. I think this move is in the right direction, even if it is a technological challenge"

and represents a refocusing towards the core strengths and assets of the Sega business and away from their weaknesses (eg the hardware business). Such a move is sensible, as it removes the strictures preventing them from exploiting their intellectual property on larger installed bases (PS, PS2, X-Box, etc)."

Nevertheless, **Edge** can't help feeling that a greater appreciation of the potential of foreign markets early in the lifecycle of the Dreamcast might have averted or alleviated the company's current woes.

(From left) ***Phantasy Star Online***, ***Madden 2K1***, and ***Quake III Arena*** remain central to Sega's online strategy in the States



Nintendo goes it alone

Big N ends its agreement with THE and pushes on-sale dates of top 64bit titles further into 2001

NOE managing director of sales and marketing David Gosen (above) defends the decision to end THE arrangement. Employees such as Shelley Friend (top) will move from THE to NOE to maintain continuity

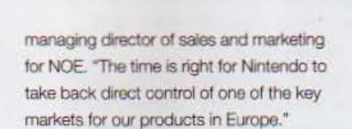
Nintendo's revised UK release schedule for the Nintendo 64 doesn't make pleasant reading for owners of the console, but an announcement from Nintendo of Europe that it is to end the agreement with current distributor, THE Games, may provide some hope.

Nintendo fans in the UK are used to being treated poorly by the company, but delays to several major titles will prove difficult to swallow nevertheless. The excellent *Excitebike 64*, for example, has been pencilled in for release in June, while a PAL version of *Kirby 64* will not be seen until next July, despite the fact that **Edge** reviewed import copies of both games in issues 86 and 85, respectively. "I think the lessons that Nintendo needs to learn are that Europe is actually now a bigger market than the US – I think we overtook it about this time last year – and that if we are a bigger market, in order for them to maximise revenues and sales, they really do need to try and aim for sim ships across all European languages," points out **Gary Liddon**, of Climax. But it is still unlikely that Britain will ever see the exceptional *Sin And Punishment*, and *Conker's Bad Fur Day* has also been pushed back to September 2001, though it too may have difficulties reaching the console due to its adult content.

GameCube for 2002

The revised schedule would appear to indicate that GameCube will also not be released before 2002, with the eagerly awaited *Dinosaur Planet* and *Eternal Darkness* possibly being postponed for release on the platform.

But with NOE committed to taking full responsibility for the sales, marketing, and distribution of Nintendo products in the UK as of March 2001, there is some hope that an end to lengthy delays and below par PAL conversions may be in sight. "The establishment of the branch office in the UK is part of an overall strategy by Nintendo to take control of key European markets and centralise distribution out of its European distribution centre in Grossostheim, Germany," argues **David Gosen**, managing director of sales and marketing for NOE. "The time is right for Nintendo to take back direct control of one of the key markets for our products in Europe."



David Mackay, chief executive of THE's parent company, John Menzies, put on a brave face: "The computer console and games market is highly volatile, exposing the group to potentially significant profit variations and working capital and currency risks." But the announcement will also means that the majority of the company's 90 employees will be made redundant. Many of these, such as Shelly Friend, who will become head of PR for Europe, will move to NOE to maintain continuity.

While the quality of the titles to be released during 2001 shows there is still life in the N64, UK gamers have long been let down by a lack of support from Nintendo. If this move indicates that this will come to an end, then so much the better, but with *Pokémon* and the company's dominance over the handheld gaming market keeping it profitable, there is no guarantee that the level of support will improve when GameCube is launched.

(From left) *Excitebike 64*, *Conker's Bad Fur Day*, and *Kirby 64* have all seen their 2001 release dates slip since the announcement

Monopoly money for Hasbro

Infogrames stumps up $100m for Hasbro Interactive despite recent profit warnings as French investors continue their love affair with videogames

Bruno Bonnell (top) is delighted to have furthered Infogrames' external growth strategy, picking up the Monopoly licence as part of the $100m acquisition of Hasbro Interactive

Having failed to agree an acquisition price with Eidos, Infogrames looks set to take full advantage of the confidence shown by French investors in the videogame sector by acquiring the loss-making Hasbro Interactive, largely through a new share offering. The $100m (£68.7) acquisition will consist of $5m in cash and $95m from 4.5m newly issued Infogrames shares.

Other components of the strategic agreement consist of a 15-year licensing deal with Hasbro for the exclusive rights to develop and publish games based on Hasbro properties. The agreement has the possibility of a five-year extension and the acquisition of Hasbro Interactive's games portal, Games.com

"Infogrames and Hasbro are truly poised to become worldwide leaders in the digital entertainment market," says **Bruno Bonnell**, chairman and CEO of Infogrames. "Infogrames' external growth strategy consists of three requirements: a willingness of the prospective partner's management to share our strategic vision, a complementary set of skills and products, and, finally, value for our shareholders. The Hasbro Interactive and Games.com acquisition meets these criteria." He was keen to point out, though, that the agreement will not diminish the future investment capacity of Infogrames, and pointed out that there is still the possibility of an agreement with Eidos in the future.

Shareholders yet to ratify deal

The deal, which is subject to the approval of Infogrames shareholders and is due to complete in March 2001, will give the company a huge number of lucrative franchises. These range from Microprose titles like *Civilisation* and *Rollercoaster Tycoon*, Atari games including *Centipede* and *Pong*, to Hasbro's portfolio of non-interactive licences, which includes Monopoly, Risk, and Action Man.

Above all it demonstrates that investor confidence is an essential tool for an acquisitive strategy. It remains to be seen, though, whether such a strategy will work, particularly in the light of a recent profit warning from Hasbro, which cited the success of *Pokémon* as a factor in lower than expected fourth-quarter sales.

2001 to be biggest year yet

Predictions point towards the UK videogame industry increasing in worth, but plagued with doubts over pricing strategies

Leading trade paper *MCV* has predicted that the UK videogame industry will be worth £1.15bn by the end of this year in terms of total hardware and software sales. While that represents an increase compared with the value of the industry last year, the growth in the value of software sales is not commensurate with the growth of software units, owing largely to declining prices that are a hallmark of transitional periods.

As expected, Game Boy Color outsold all other consoles, generating hardware sales of £89.6m in the process, but both the Dreamcast and PlayStation, which received a boost with the release of the redesigned PSone, performed respectably, as did PlayStation2, despite shortages at retail. Next year should see continued strong sales of PlayStation2, but it remains to be seen how generous this Christmas period will be to the longer-term fortunes of Sega's Dreamcast, and indeed PSone. Microsoft's X-Box and Nintendo's Game Boy Advance should offset any decline in sales of other platforms, but it is currently looking unlikely that GameCube will hit these shores until 2002.

For the second year running, the general decline in the price of videogames and the strong success of budget titles, while accounting for an increase in software unit sales of 15 per cent, has lessened the overall increase in the value of these sales. While this has been seen before during years of transition, evidence from Japan has not demonstrated a full recovery. In the east, this trend is almost certainly due to the competition from DVD movies and the wireless Internet, but it will be interesting to see whether UK gamers, having attuned themselves to budget ranges, are prepared to pay high prices for new software in the new year.

MCV predictions for 2001

Hardware	Value		
PlayStation	£72m		
PlayStation2	£49.5m		
Game Boy Colour	£89.6m		
Game Boy	£4.2m		
Nintendo 64	£11.2m		
Dreamcast	£36m		
Total hardware sales	£262.5m		
Software sales	£892m		
Total market value	£1,154.5m		
Market comparison	**1998**	**1999**	**2000**
Total UK sales units	29m	33m	38m
Total UK sales value	£882	£885.8	£892

Incubating indies

Microsoft announces new programme to encourage fresh talent to develop for X-Box

Having acquired Digital Anvil, gaining *Freelancer* (above) in the process, Microsoft is taking care of independent developers. Paul Fox (right) likens the process to demos in the music industry

Despite the rumours that are flooding in to fill the yawning gap between X-Box announcements, including some fairly accurate Internet reports concerning the console's appearance (as well as some less-than-accurate ones), Microsoft has remained relatively quiet. What can be confirmed as fact is that the company recently acquired developer Digital Anvil, and unveiled two support programmes for independent developers. It is also rumoured that the company will put an end to speculation regarding the way the finished console will look when it is unveiled in the US at CES in January.

The acquisition of Digital Anvil was announced at the start of December, and will result in the company's *Freelancer* and an unnamed RTS title being developed for X-Box. The developer will remain based in Austin, Texas.

Earlier, at the Australian Game Developer Conference in November, Microsoft outlined its Independent Developer Program and the X-Box Incubator Program. "The key ethos behind this is still that X-Box is there to give the gamers the best possible videogames experience possible," explains **Paul Fox**, head of European PR. "All of the big guns out there have got a fantastic and a consistent track record in delivering top notch interactive entertainment. But you'd be naive to think that all of the best titles in the future are going to come from people like Konami, Eidos, and other established players."

The Incubator Program will see the company supporting developers who have the resources to license an X-Box Development Kit, but who haven't secured a relationship with a publisher. Game concepts approved by the X-Box team will be supported by Microsoft for six months, by which time they will theoretically be in a position to establish a relationship with a publisher. The Independent Developer Program on the other hand, is aimed at developers who don't have the resources to license a dev kit. "If you look at the music industry as an analogy, a band can record a demo tape to try and sell their idea to a record company," explains Fox. "What we're doing is giving a lot of these independent developers the resources to produce a really good quality demo tape to sell to a publisher." What this means is that an X-Box Prototype Kit will be supplied free of charge, which should enable a prototype for a game to be developed.

While not quite on the scale of Indrema's commitment to small-time developers, for example, such measures are laudable. For further information see p136.

THQ goes mobile

Publisher teams up with Siemens to produce games as new hardware concepts are unveiled

One of the latest big-name videogame publishers to commit to the burgeoning portable gaming sector is THQ, through a deal with Siemens. As announced at ECTS, a strategic partnership between the publisher and Siemens' information and communication mobile division will see the two jointly develop games for the mobile game market.

The company recently demonstrated a series of the mobile devices that will feature such content, such as the SIMpad CL4 – an A4-sized device, which features wireless Internet browsing and cordless data communication via Digital Enhanced Cordless Telecommunications (DECT). A touchscreen and virtual keyboard complement a colour display. Meanwhile, the prototype MultiMobile incorporates GSM technology and the Microsoft Pocket PC operating system, and the company's prototype UMTS handset, the SX45, also shows the potential of future generation portable devices, boasting significant screen estate and MP3 playback.

Of most interest, though, is undoubtedly the Global Pl@yer. Superficially resembling Nintendo's failed Virtual Boy, both Siemens and THQ will be hoping that if it ever does become a reality, it proves more popular. A 'virtual reality' headset is connected to a gamepad-styled base station – which contains the processor and memory – via Bluetooth technology. It may never see the light of day, but it is just one example of the way in which videogames are attracting the interests of a diverse range of companies seeking to exploit both the hardware and content markets, amid rumours that a sizeable corporation is seeking to join Microsoft in muscling its way into the conventional console market.

Clockwise from top: Multimobile, the Global Pl@yer prototype headset, and SIMpad CL4

Cinemaware flies again

Crawfish Interactive breathes new life into classic WWI flying game in conjunction with industry legend

Crawfish's conversion of *Wings* demonstrates the significant capabilities of Nintendo's new handheld, paying tribute to the Cinemaware original, as these screenshots demonstrate

Last month handheld development specialist Crawfish Interactive presented three technical demos that highlighted the impressive capabilities of Nintendo's Game Boy Advance. This month, news has emerged that in collaboration with the refounded Cinemaware, one of these demos will form the basis of a handheld version of the classic WWI flying game *Wings*.

Having closed operations in 1991, Cinemaware has recently been reformed by game designers Lars Batista and Sean Vesce, who between them have worked on *Mechwarrior 2* and the *X-Wing Vs Tie Fighter* series. Originally

known for games like *Lords Of The Rising Sun* and *Defender Of The Crown*, the company plans to extend this impressive back catalogue to next-generation hardware, with an X-Box and PlayStation2 conversion of the latter is reportedly underway already.

Explaining his company's involvement, Crawfish MD **Cameron Sheppard** stated: "The Cinemaware brand still evokes strong, positive feelings for a lot of people. The titles they created were innovative and graphically stunning, with *Wings* in particular being hugely popular. We're really excited to be working closely with them on this project for Game Boy Advance."

Originally released in 1990 for the Amiga, *Wings* allows players to take on the role of a rookie pilot, advancing their career through 230 missions consisting of dogfights and bombing runs. As these shots demonstrate, the title demonstrates the significant capacity of GBA, and with an equally impressive firstperson shooter engine and Formula One racing engine also in development, Crawfish seems well placed to take advantage.

The winds of change

The Tornado Group sets out its broadband stall early, tempting Eidos, Activision, Rage, and Midas into a trial run

With the digital distribution of gaming content set to increase substantially when Sony rolls out its long-awaited broadband strategy and Microsoft releases X-Box, British company Tornado Group is seeking to position itself for early-mover advantage. A series of deals recently signed with big-name videogame publishers will allow the company to trial the electronic distribution of PC titles over its secure infrastructure.

Eidos, Activision, Rage Software, and Midas Interactive have all signed up for the experiment, with Rage CEO **Paul Finnegan** commenting: "We believe these trials give us invaluable experience of distributing games electronically direct to the end user, a distribution channel which we believe will become increasingly important." Existing and forthcoming PC titles published by each of the companies are to be distributed by Tornado using its Digital Media Distribution System (DMDS) to a selection of European retail partners.

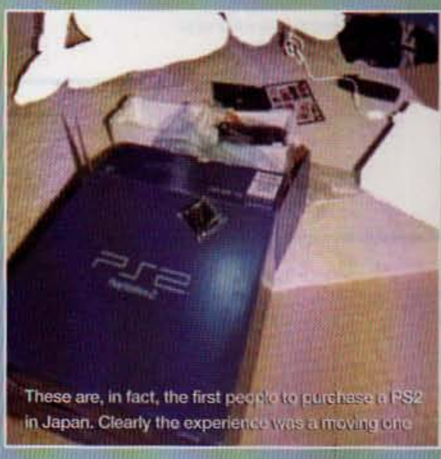
Though initial trials will be restricted to PC software, DMDS operates across multiple platforms, and is scalable in anticipation of the rapid growth of downloadable content across devices. Tornado's system provides publishers and retailers with a secure infrastructure that is invisible to the consumer, who can then purchase and download products either from a Web site or in-store kiosk.

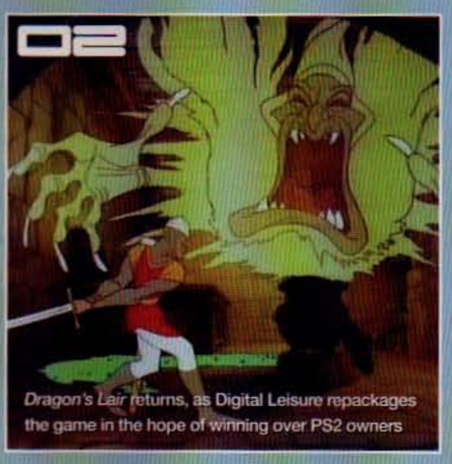
"It is our vision to be the world's leading business-to business provider of digital distribution systems for entertainment media," says **Neil Ferris**, Tornado's commercial director. "It has therefore always been our intention to expand quickly into games and other markets." With a strong set of technology partners, including Oracle and Sun Microsystems, it will be interesting to see how successful the trials are, particularly in the light of Sega's refocused business strategy and Sony's non-committal approach towards its own broadband infrastructure.

If the the trials of the system prove successful, Tornado Group says revenue models will be based on existing publisher/distributor relationships.

Neil Ferris (left), Tornado's commercial director, and Ian Watson, managing director, are determined to set the standard for digital distribution gaining first-mover advantage

Those who preordered a PS2 were treated to an insight into the machine's production process


These are, in fact, the first people to purchase a PS2 in Japan. Clearly the experience was a moving one



Dragon's Lair returns, as Digital Leisure repackages the game in the hope of winning over PS2 owners

Sega's pitiful *Time Traveler* (sic): an early inspiration for the Quick Time Event gameplay of *Shenmue*?

Space Ace followed the *Lair* series. What's next – *Super Don Quixote*?

01 Preaching to the preorder masses

UK: Not everyone who managed to preorder a PlayStation2 is entirely happy with either the console or its launch software (according to **Edge**'s postbag, at least). But the company's decision to send out an elegantly designed booklet to those with preorders in advance of the console's launch apparently did meet with approbation. Taking consumers through the manufacturing process, software line-up, and available peripherals, while also touching on Sony's infamous Third Place concept, the production values of the brochure – designed by UK-based Subliminal – are further evidence that the company is devoted to delivering its customers with something out of the ordinary. More information can be found at www.subliminal.co.uk.

02 Dirk Daring re-enters the Lair

Canada: The '80s were responsible for delivering more than their fair share of jaw-dropping videogaming moments, but clapping eyes on 1983's *Dragon's Lair* must surely rank up there among the most dramatic, its cartoon 'graphics' and 50p/play shocking in equal measures. Those wishing to relive such halcyon, gameplay-free days of laserdisc gaming need wait no longer, because Digital Leisure has ported three Dyer/Bluth classics (*Lair* and *Lair II*, plus *Space Ace*) to yet another format – this time DVD – along with Sega's pseudo-holographic *Time Traveler* (sic). Those who've recently honed their gaming skills with *Shenmue*'s QuickTime Events will automatically be at an advantage here, although sticking a fork in your head is only mildly less enjoyable.

Data Stream

Top-selling PS2 game for the first week after UK launch, according to Chart Track: ***Tekken Tag Tournament* (15,575 copies)**

Bottom-selling PS2 game for the first week after the UK launch according to Chart Track: ***Gradius III & IV* (95 copies)**

Sega's confirmed release date for *Phantasy Star Online*: **February 23**

Acclaim's reported losses for the fiscal year ending August 31: **$131.7 million**

Eidos' reported pre-tax losses for the six months ending September 30: **£82.3 million**

Japanese sales of PlayStation2 week ending November 19: **13,392**

Japanese sales of N64 week ending November 19: **2,764**

Japanese sales of Dreamcast week ending November 19: **1,948**

Online forum site which is currently considering a counselling support group after one of its players staged a fake suicide: ***EverQuest***

N64 game which is currently selling more copies in the States than *The Legend Of Zelda: Majora's Mask*: ***WWF No Mercy***

Amount offered on Ebay for a huge collection of videogames, consoles, and peripherals dating back to 1986: **$70,000**

Name of Nintendo's fourth Pokémon movie currently in development: **'Celebi: An Encounter Crossing Time'**

Expected cost of GameCube development licence per unit: **$6**

Expected cost of X-Box development licence per unit: **$8**

Number of British people who expect to be online by Summer 2001, according to a Mori poll: **15m**

Average number of hours spent online per week by British people, according to a Mori poll: **four**

Percentage of British people who feel dependent on their Internet access according to a Mori poll: **53 per cent**

US market share of PSone, week ending November 25, after stock shortages of PS2: **42 per cent**

Price Infogrames is believed to have paid for Hasbro Interactive: **£100m**

03 Making money, having fun

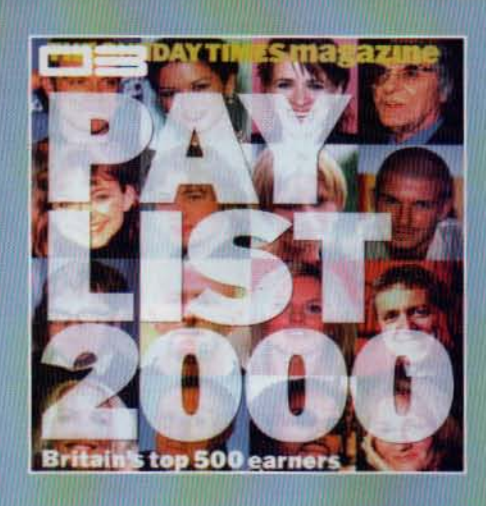
UK: Uncomfortably wedged in between Griff Rhys Jones and Mel Smith is Jez San, who, at number 38, is the game industry's highest earner according to *The Times* Top 500 Pay List 2000. The Argonaut boss sets aside a mere £73,000 a year for his salary, but after selling shares in ARC, San trousered a total of £24.373m in the past 12 months. Other notable additions (at equal 263) include James, Richard, and David Darling of Codemasters, who have each made £3.199m in dividends from a very profitable year. Ryan Giggs down at number 295 may want to consider changing careers.

04 Your chance to lead Sega to glory

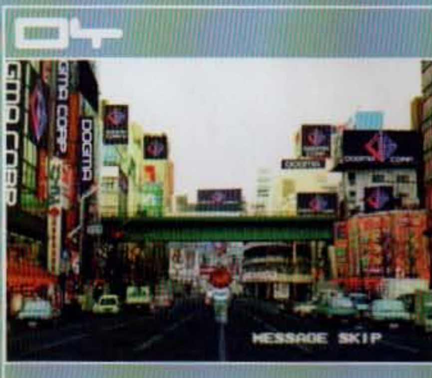
Japan: You are in a near future. Sega entrusts its future to a young boy and girl. The company calls this project *Segagaga*, and its objective is to design the company strategy and lead it to regain its past glory. No, this is not a joke at Sega's expense, rather Hit Maker's opportunity to stick the knife in before anyone else. An RPG element of the game will see the player trying to thwart rival company Dogma by searching Akihabara for interesting products to market. Apparently, a number of these projects are already in development in real-life, serving to further confuse fantasy and reality. Reach 100 per cent market saturation and the game is won; zero per cent and it's game over. *Segagaga* will be exclusively available through Sega's online store, Dreamcast Direct.

05 Furby hacked to bits

Canada: Now two years after its glorious buy-frenzy Christmas, Furby's heavily protected internal architecture has finally succumbed to the hacking community. Canadian computer consultant Jeffrey Gibbons took up the $250 challenge issued by urban folklore guru Peter Van Linden, and rendered his Furby reprogrammable. From simply changing his voice effects to teaching the little guy to play chess, the hack kit is a Furby-loving control freak's dream come true.

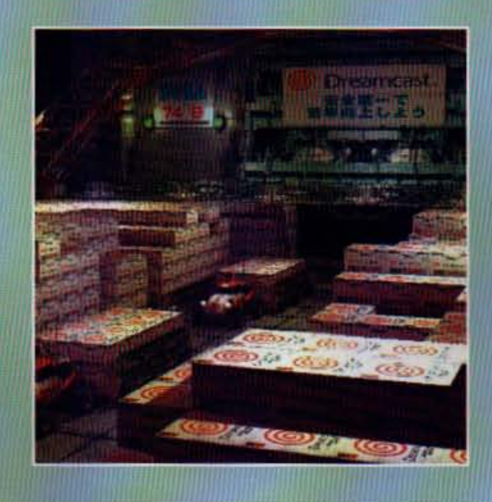


Out-earned by Griff Rhys Jones – Jez San must be mightily disappointed. There's always next year



Scour Akihabara in a bid to turn up a product you can make a mint out of marketing to the world

The aim is to see Sega triumph over arch-rival Dogma in the race to become king corporation



Thanks to one man's persistence, Furby owners everywhere can corrupt their electronic pet

Soundbytes PS2 prelaunch special

"In my opinion, paying £300 for a console makes you borderline certifiable, even if you consider the PlayStation2's ability to play back DVDs"
Steve Boxer, who has clearly never bought a console at launch, in *The Daily Telegraph*

"It's a movement rather than a product. It's like a religion – it's a way of life"
Trevor Beattie, Sony's advertising consultant preaching to the converted

"But the biggest difference is in the number of polygons drawn in a second: a cool 75 million"
The Guardian's online section overstating PS2's technical capacity

"Indeed, game consoles are now the favoured source of entertainment for kidults"
Steven Poole identifies PS2's marketing niche in *The Mail on Sunday*

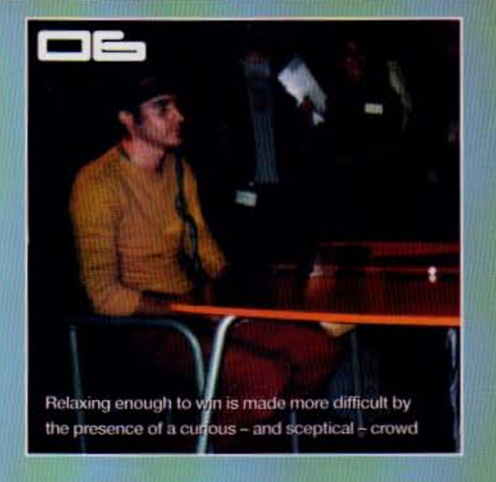
"Even 'The Phantom Menace' director George Lucas, who has seen an advanced prototype of the new machine, seems to have been awed by the high-quality graphics"
Maybe ***The Mail on Sunday*** really meant to say 'Japanese import'

"PlayStation2 uses DVDs for storage instead of CDs"
The Mail on Sunday's researchers clearly earn their wages

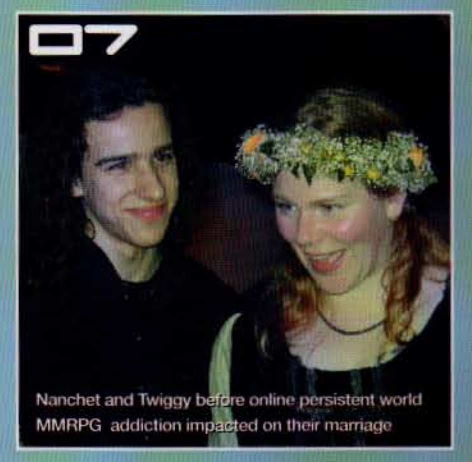
"While today, 'The Matrix' is just a movie, in three or four years, maybe this will become the actual content of the games network"
Ken Kutaragi on how you will be able to lose your mind in PS2

"With the exception of *TimeSplitters* and a game called *Summoner*, the others look like PSone titles"
BBC News Online's sage opinion on the quality of PS2 launch titles

"PlayStation2 beats its illustrious predecessor on every count. Its computers are ten times faster"
Go on, have a guess. Yes, it's the ***The Mail on Sunday*** again



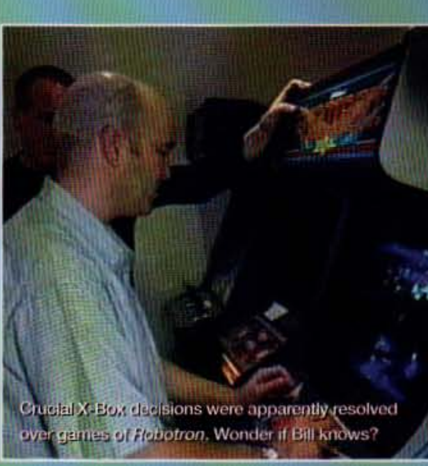
Relaxing enough to win is made more difficult by the presence of a curious – and sceptical – crowd



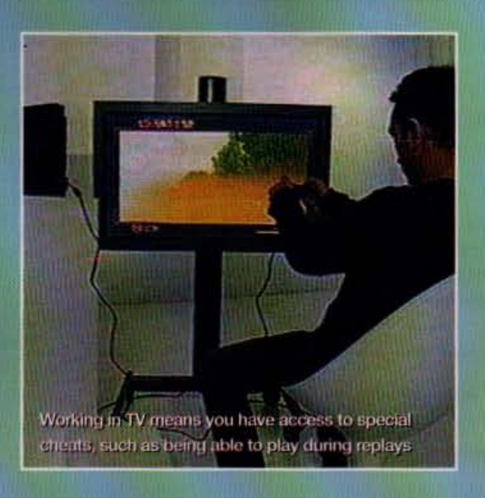
Nanchet and Twiggy before online persistent world MMRPG addiction impacted on their marriage

Counsellor Windwalker no doubt felt at home in Amsterdam thanks to the suitably fantastic setting

X-Box evangelist J Allard skating through carpeted corridors. Just as he does every day. No, really



Crucial X-Box decisions were apparently resolved over games of *Robotron*. Wonder if Bill knows?



Working in TV means you have access to special cheats, such as being able to play during replays

06 Playing on your mind

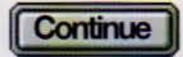
Sweden: Wannabe Skywalkers hoping to develop their powers of telekinesis might want to seek out *Mindball*, a twoplayer tabletop game. Brutally functional headsets sense how 'relaxed' each player is, and gently roll the 'Mindball' to and fro. The result is futuristically supernatural, though the thick black cables snaking into the underside of the desk might give observant passers by more of an insight into the machine's mechanics. Those mad for mindgames can find out more at www.interactiveinstitute.se.

07 In sickness and in elf

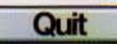
Holland: The first *Ultima Online* European players to get married tied the knot in Amsterdam this October, having already wedded ingame last August. The tale of Nanchet and Twiggy, as told by senior counsellor Windwalker, can be found at http://counsellor.euroshards.org/public/hwedding/. Be warned that it is only intelligible to *Ultima Online* players, though. Unfortunately, when their confusion about the real world starts to set in and the marriage hits the harsh reality of online gaming addiction, they won't have access to the recently announced support group for *EverQuest* players.

08 Microsoft keeps it real

UK: For those not yet convinced that J Allard and his Microsoft buddies are just a retrogamin'-'n'-skatin' krew, more evidence arrived earlier this month in a 'Money Programme' special devoted to Sony vs Microsoft. Brushing aside competition from Sega and Nintendo with an insouciance that smacked of lack of research, the programme resorted to the type of shortcuts and clichés that any ardent observer of videogames in mainstream media will be familiar with – a presenter stabbing random buttons in an attempt to convince the audience that he was playing a game while it was in replay mode, for example. Meanwhile, the sight of Allard wheeling around the Microsoft campus' carpet on his skateboard (whose pile necessitated three times as much legwork as concrete) proved that the BBC can make even the most apparently switched-on industry players mug for the camera.



Remembering Treasure's back catalogue
Sin And Punishment sees **Edge**'s games vault raided
Offline multiplayer console gaming
TimeSplitters or *Quake III*, the game doesn't matter
The re-emergence of Matthew Smith
'The making of... *Manic Miner*' is just around the corner



Nintendo's PAL N64 launch schedule
Conker's Bad Fur Day in September? Oh, the agony
PlayStation2 reports in the mainstream media
Like watching amoeba trying to perform an operetta
Dreamcast Phantasy Star Offline
Edge's preview code lacks a vital component...

09 Atom

A thin plot flutters transparent, moth-like among the pages. Brain seizes black. Wisecrack overload churns stomach. Staccato rhythm rattles like rain.

Had enough? You'd better like it for Steve Aylett's sake. Taffy Atom, private investigator with a talking pet that's half bulldog half goldfish, has to solve a problem: who stole Tony Curtis's brain from the Beerlight City Brian Facility? Answer: a power-crazed insect. That's the plot. The rest is colour and Aylett is a master painter, jibing at the state of our world through the decay of his.

Critics have rolled off phrases such as 'postmodern panache' and 'wild and crazy romp' like water off a duck's back, and, true, 'Atom' is undeniably attention grabbing. But there should be more to a novel than just the feathers to parade like the cock of the walk. Aylett has his moments – take his industrial take on interior design, Bren Shui: 'The art of exchanging negative energy with the environment through the correct placement of firearms around the house'. And the scenes shoot out like reading a Judge Dredd strip on acid.

But in the process Aylett ditches all the things that make stories worth reading. The characters are shallow. Even Atom's own murky past (his father, a circus clown who died in a car crash? Or was he an architect who vanished in a physics-defying building of his own design?) doesn't engage. And, worse, what little depth that develops is swallowed in Aylett's stylised prose.

Someone has to say it: the emperor… ahem, Steve Aylett isn't wearing any clothes.

10 Revolutionaries At Sony

Ken Kutaragi, father of the Sony PlayStation, is a maverick in corporate clothing. In this thoroughly researched book Reiji Asakura recounts Kutaragi's bloody-minded battle to create a 'modern miracle'.

This is more than just Kutaragi's story, it is an invaluable history of Sony – a titan of the videogame business – and all its corporate shenanigans that helped it whip the competition.

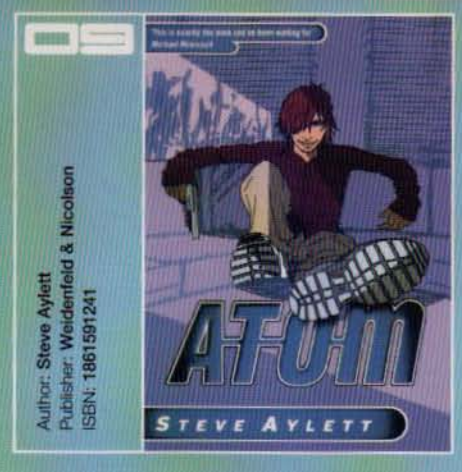
Kutaragi's journey from delivery boy in his father's printing workshop to top dog at Sony Computer Entertainment Incorporated (SCEI) is a classic nerd-turned-tycoon tale.

After university Kutaragi chose to join Sony in 1975. But it wasn't until his stint at Sony's Information Processing Research Centre, in 1984, that he came into contact with System-G, a high-quality 3D computer graphics technology that inspired the PlayStation.

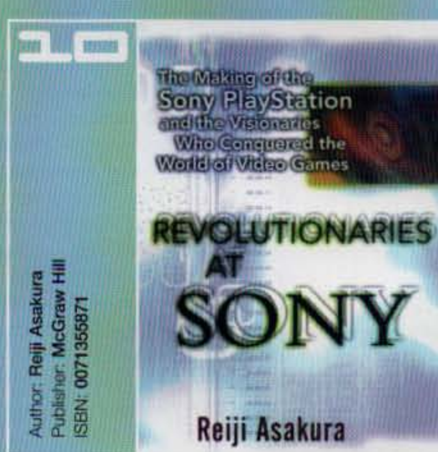
Kutaragi's vision was to combine System-G with his son's Famicom console to open 'incredible new vistas in the world of games based on digital technology'. The rest is history.

Using in-depth interviews with some of Sony's most influential figures, including Akiro Sato (VP of SCEI) and Teiyu Gotoh (the PlayStation's designer), Asakura recounts the back-room manoeuvring necessary to bring one man's vision to life. You even find out where the console's name came from.

Clearly a translation from Japanese, it is a sycophantic, though readable, eulogy, and would be a cringe-per-page book but for the fact that the revolution Kutaragi and Sony perpetrated really did happen. Asakura reveres Kutaragi, so the PRs will love it. Everyone else should draw their own boundaries between journalism and advertising. A must read for any industry insider.



Author: **Steve Aylett**
Publisher: **Weidenfeld & Nicolson**
ISBN: **1861591241**

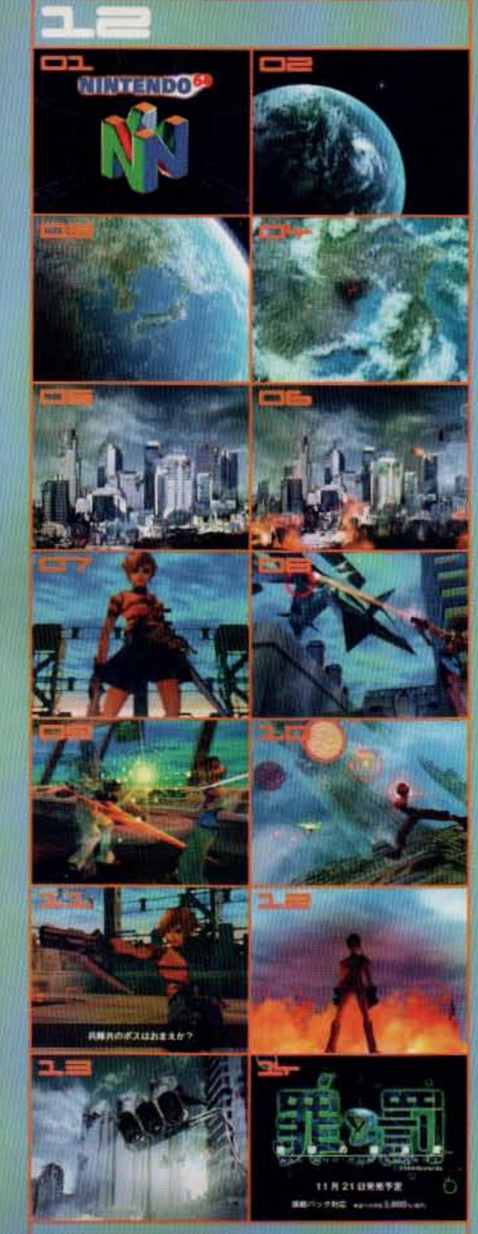


Author: **Reiji Asakura**
Publisher: **McGraw Hill**
ISBN: **0071355871**

Site: **Assembler**
URL: **http://assembler.roarvgm.com**

11 Web site of the month

Hosted by Roar!, an online videogame museum, Assembler declares itself 'dedicated to the documentation of rare game systems'. It's a mission statement of calm in a beautifully chaotic site packed with ultra-obscure electronica. Most machines listed are long gone, some were never made, and others are creatively illegal pirated productions. **Edge**'s favourite is the Sega Master System Girl, a pink wireless Master System apparently produced only in Brazil.



12 Advertainment

Japan: A number of familiar themes, including war and friendship, pop up in Nintendo's television ad campaign for the excellent, Treasure-developed N64 title *Sin And Punishment* (see p102).

01 Voiceover: "N64!" 02 Shot of Earth from space 03 Camera zooms in on far east 04 Explosions over Japan clearly visible 05 Camera pans across familiar sight… 06 … a vision of Tokyo in flames 07 New voiceover: "I want to believe" 08 "I want to believe in my friends" 09 "I want to believe in me" 10 Male voiceover again: "Catch a ride from your enemies" 11 "Open your future" 12 "Fight with your gun and sword" 13 Ruined Tokyo image returns. VO: "Action shooting game" 14 "*Sin And Punishment*"

REDEYE

Commentary from inside the videogame industry

Brand loyalty and the real villains of the piece

Playing *Christmas NiGHTS* on a winter evening, a twinge of pain can be felt. But it's not the dull ache from memories of Yules gone by. No, it's the realisation that Sega's Saturn – undersupported, underpowered, and undermined by a worldwide marketing campaign from Sony – never really stood a chance. Check Sega fan sites around the Net and you'll find a thousand tales just like RedEye's; fans mourning the death of their baby at the hands of a machine that marched in and stole an industry away from under Sega's nose.

Every Saturn owner dreams of a utopian, franchise-free world where it was their machine that won the war. But here's the reality: if Sony's machine had been the rushed and poorly designed one, all the soulless sports franchises, ports, and licences that proliferated on the PlayStation would have been Sega branded instead. It's easy, in the position of a brand-loyal Saturn fan, to kid yourself into thinking that Sega would have been self-sacrificing, maintaining a higher standard of quality control. It's easy to forget Sega is a multinational company, not a kindly old uncle. *NiGHTS* is supremely innovative, holding hours of delight within its quirkily depicted levels, and it's a gaming tragedy that it reached so few people. But if things had been different, *PaRappa* could have been that era's victim. Those who see Sony's machine as devoid of personality must have a convenient blindness to Matsuura's work, just as the PlayStation faithful who populate chatrooms and blithely put the Saturn's failing down to poor software have obviously never experienced the joys of *Sega Rally* or *Panzer Dragoon Zwei*.

Of course, brand loyalty is perfectly natural and instinctive behaviour in young, passionate, impressionable people. In the playground, children wore their colours on their lunchbox – 'A-Team' versus 'Knight Rider', 'Dukes of Hazzard' versus 'Battle of the Planets'. Arguments ensued, battles were fought, knees were grazed. Why? Because everyone knows they're right, because everyone's afraid that they might have invested in the wrong choice, and because self-justification is worth fighting for. And, just like the argument over who'd win in a TV-fiction duel between Mr T and Michael Knight, every console war is ultimately unresolvable. Both sides have strengths, both sides have weaknesses. Those who refuse to acknowledge the pleasures of one purely out of some mistaken loyalty to the other are simply missing out.

Besides, as anyone who's managed to stomach a career in the back-scratching, hype-ridden world of videogame journalism as long as RedEye will realise, it's important to maintain a certain distance from the companies involved. It's fine to support a format, thus it's understandable that the Saturn is still mourned, but obsessing over its creators as infallible gaming gods is ridiculous. Case studies abound; there's the reviewer who cannot bring himself to criticise *Yoshi's Story* because Shigeru Miyamoto had a hand in its creation.

Away from journalism, watch the Square fans who scratch around looking for ways to justify laying out £40 on another autistically charming *Final Fantasy* epic, or those perceived as the truly hardcore – the Neo-Geo owners, who've watched the the painful, drawn-out death of SNK and wept into their *King Of Fighters* and their *Cool Cool Toons*. Suffering for your art is noble enough, but wouldn't it be easier if the entire gaming community stopped pretending that any one company is worthier than the rest? By all means confine your electronic entertainment purchases to a single machine, but don't let that cloud your judgement of the strengths of rival gaming platforms. Ultimately, be aware that brand loyalty within the game industry is flawed, since – predictably – it's always those you love that let you down.

To this end, it's Sega's fault Dreamcast has so far proved a disappointment in raw sales terms. There can never have been a console so well supported by such a massive proportion of original, compelling titles, nor a company so reluctant to spend money on actually telling people about it. It's Sega's own fault that its own machine – a piece of hardware that its hardcore following have invested so much in – has been dubbed redundant by most sectors of the media after just over a year. It's no surprise that the fans are angry, then, but their vitriol is misdirected. Ask a Dreamcast loyalist who they hate and they'll curse Sony, not the company which has let them down yet again – their beloved Sega.

Still, love is blind, and the digitally evangelical continue to profess their loyalty to multinational companies. "Cut me and I'll bleed Dreamcast," the Sega warriors cry, though a brief scan of fan bulletin boards shows they're ready to jump ship to the GameCube if their Sonic heroes confirm their rumoured intention to go software-only.

Ask a Dreamcast loyalist who they hate and they'll curse Sony, not the company which has let them down again – Sega

The Saturn is gone. How long will it take before Dreamcast follows suit? Maybe PS2 will be the next to go, maybe the GameCube'll be a Jaguar, and maybe the world will become slaves to Bill Gates' X-culture. Whatever. RedEye's red eyes may be so thanks to Sega's incompetence, but he'd still like a *NiGHTS* lunchbox.

RedEye is a veteran videogame journalist. His views do not necessarily coincide with ***Edge****'s*

We can take a pure aesthetic joy in aspects of games that might be ethically troubling if transferred to the real world. The most obvious of these is the field of weapon design. The pleasure of finding a new type of gun and trying it out before rounding the next corner is the morally neutral, childlike delight of playing with any new toy.

Of course, in a videogame, a gun is never just a gun. In many sorts of game, it is the primary means by which you interact with your environment, and the primary means by which you gather information about it. No doubt some media-theory academic has already elaborated a psychosexual theory depicting *Quake III* devotees as permanently tumescent: the shotgun is held out stiffly before the player as a penis, used to probe the darkness of a maze of vaginal tunnels.

If that seems risible, it is certainly still true that the weapon is a sensitive organ: it tells you as much as you tell it. The targeting reticle of *Deus Ex* differentiates between enemies and allies; the threat detector of the K7 Avenger in *Perfect Dark* alerts you to autogun emplacements; the Farsight lets you see through walls; and so on. And if some ingame weapons are attractive as purely cosmetic gizmos – the satisfying clunk of a reload animation, or spectacular trails of smoke and fire – there are other types that cleverly strike a balance between utility in the fictional gameworld, and extra-contextual utility to the player. For example, the red laser sight on *Metal Gear Solid*'s assault rifle both looks good and serves as an elegant solution to the problem of aiming in a thirdperson perspective.

Weapons are also simple semiotic chips in the poker game that exists between you and the challenges of the videogame environment. Through the acquisition of new weapons, we feel a new surge of power, and the odds turn in our favour. Perhaps the fact that ordinarily our left hand is a phantom limb in the gameworld – never seen, never used – contributes to the bliss of suddenly wielding double Uzis in *GoldenEye*. The relations of force between you and the enemy are suddenly changed. Come and get some now, you bastards...

Good weapon design depends, of course, on a subtle balance of aesthetic considerations – the way it sits in your virtual hand, the rumble or bang or surgical whirr of its firing sonics, and the effect it has on enemy flesh. We lovingly remember the first time we tried out the Storm Arrows of *Heretic II*, or the first time we unleashed a Redeemer in *Unreal Tournament*.

But most of all a good weapon offers a new mode of interacting with your surroundings. Here, as in other areas, videogames have the advantage over movies. The Farsight is clearly modelled on the EMP Gun in the Schwarzenegger flick 'Eraser' – but *Perfect Dark* actually builds what was only imagined before, and lets you use it to negotiate a solid world. The recoil physics of *Quake*'s rocket launcher made possible the new FPS paradigm of rocket jumping. And there are few more gleeful game moments than being pursued down a maze of corridors by a horde of Datadyne goons, only to turn the tables by slapping a Laptop Gun on the wall as you round the next corner. Hearing its bursts of fire behind you while you go about your work is superbly satisfying – this gun is not just an inanimate tool; it's your friend.

Sometimes, however, imagination can override functionality to negative effect. The Cerebral Bore of *Turok II*, for example, is a wonderfully sadistic aesthetic idea, but its impractical sluggishness rapidly becomes tiresome. Other weapons simply don't transfer to the digital sphere in a satisfying way. *Perfect Dark*'s crossbow, for example, ought to be a great weapon, but using it feels like chucking toothpicks. Videogames are good at showing kinetic energy – the ballistic spray of bullets, a speeding rocket. But potential energy – the coiled-up power in a crossbow, which we can taste or feel in the air in real life, owing to our knowledge of the way wood and iron behave – is lost in a polygon world.

Quality of weapon design, moreover, is never enough in a videogame: quantity is essential. We need guns. Lots of guns. And a vast array of weaponry brings up the question of 'balance' in weapon sets. Is it really such a good idea? The concept that someone waving a pistol ought to be able to go up against a rocket launcher and have a good chance in the fight seems absurd. And storming down the corridor with twin Reapers is so much fun precisely because you know that, for the time being, you are better armed than anyone else in the game. If all weapons are effectively the same, with brute power offset by slowness, and remote operation offset by vulnerability, then there is no reason to want to find one weapon rather than another. In effect, you might as well all be firing peashooters.

Free Radical's superb *TimeSplitters* demonstrates that once you've got a nearly rock-solid 60fps and a bunch of good environments, it really is all about the weapon design. The game's different time zones ensure a wide range of weapon types from the somehow hilarious blunderbuss and sundry standard M15s and pistols, to a pleasing set of futuristic energy guns. The sound design for each weapon is viscerally true, the discovery that the sci-fi pistol can bounce its bullets off the wall makes the player grin stupidly, and the inclusion of a brick is nothing short of genius. But Free Radical has not bogged itself down with an anal concept of weapon balance. Once you have a rocket launcher or the sci-fi autorifle, you want to keep it as long as possible. For power only means anything when there are people less powerful to use it on.

TRIGGER HAPPY

Steven Poole

Weapons: the ultimate interactive tools

Weapons are simple semiotic chips in the poker game that exists between you and the challenges of the videogame environment

Steven Poole is the author of 'Trigger Happy: The Inner Life of Videogames' (Fourth Estate, £12). Email: trighap@hotmail.com

The issue of how games will change as the next generation consoles are released is interesting.The direction in which developers are moving is obviously crucial to the future of videogaming, and there are some key questions that need to be asked.

Most fundamental of these are whether there are enough people playing videogames to support the industry, and of the people who are gamers, are they playing more? I suspect that the answer to both of these questions is no, as there seems to be trend of people moving away from gaming, and discussion of this is rife in the industry. I have tried to figure out the reasons for myself, of course, but I haven't settled on a straightforward answer, and, indeed, different people appear to have different ideas about the root cause of the problem. However, what is clear is that no one – be they involved in hardware or software – has seen their results improving of late.

games looking too similar to each other. That gives a uniform impression of games and make them seem homogeneous, so players are turned off. Combine this with the trend of delivering titles publishers are certain will sell, and, of course, producing sequels. This is the core of marketing in the current videogame market. If you take a closer look at the market, you would notice that money is moving mainly to titles like *Zelda*, *Final Fantasy*, or *Dragon Quest*. In the same way, other companies are moving away from RPGs and adventure games as they can't compete, and are focusing on other categories (sport, racing, puzzles). The net result is a near-anarchic game release situation. This has been the state of play for years now, and it does not look like changing. In fact, it is a situation everybody in the market wanted. However, consumers now say things like: "Well, that's all videogames are about." This is sad, but it is our fault, I think.

seems to be espousing, or even discussing, such a strategy. Developers are aware of these possibilities, but they just refuse to work this way. They prefer a global strategy, which presents a much lower risk. If you set a precise target, it will look limited compared to the rest of the market, and that will apparently increase the level of risk. Sometimes titles appear to be moving in this direction, but not deliberately. If these kinds of precisely targeted strategies put creators' ideas to the fore, sequels do not.

Sega chose the market the online option. However, this isn't proving successful in Japan just yet. More time was necessary to educate people in this new way to play. If you try online gaming, you soon realise how much fun it is, but you have to attract users, and that isn't happening just now. So what is wrong with online gaming? Would you think it is its speed? Or maybe the price? I would say it is the difficulty to impose a flat rate. The objective

AV OUT

Toshihiro Nagoshi, president, Amusement Vision

Dwindling markets: what's the solution?

To draw an analogy, we rely heavily on technology like TV sets, phones, or cars, and use them every day. If one is these breaks down, replacing or fixing it is vital. Moreover, if their attraction is strong, that can push people to upgrade. Videogames do not work like that. They are not essential to our everyday lives. We could survive easily without them. Even if videogame hardware changes, this doesn't necessarily increase software sales. In this sense, the current sluggish market situation should be seen as normal. So, what is the big problem? I would say the lack of interesting titles and the way developers think.

However, to put this to one side for a bit, it is worth noting that a lot of people say there are too many games released, but I don't agree. I would say there are not enough games. These same people explain the problem by saying that while the number of gamers is decreasing, developers are continuing to churn out the same number of titles each year. I think that the reality is that developers aren't thinking enough about the merits and capabilities of hardware and matching them with users' expectations or desires. Currently,

So, what should we do? I think we should rethink the way we work. We shouldn't categorise games by genre. We should think 'target'. For example, one of these could be age. Another could be localisation. Another again could be price. It may seem simplistic, but it isn't. I'm against low price strategies in low-volume/low-age/volume-optimisation areas, for example. We have to think quality and price at the same time to avoid more people leaving videogaming.

If you lower prices once, it is difficult to go back. The price issue certainly has a great impact, but it should not seen as a blanket solution. Even if a title is cheap, if it is uninteresting, it remains uninteresting. We should work on two factors: age and localisation. For example, making a game in Japan for male children could become a target to design a specific project and make it successful. Another example would be to aim at US high school gamers in order to design a specific project. No one

If you lower prices once, it is difficult to go back. It certainly has a great impact, but it should not be seen as a blanket solution

in this business is to get revenues by increasing user numbers. To do this you need a fixed price in order to be able to evaluate your revenues.

Earlier I said that videogames are not essential for everyday life. I also said that people would buy something if it is essential, regardless of its price. So, it is a seller's market. We pay what we are told to pay. We do not discuss. However, this isn't the case with videogames. As they aren't essential, you don't need to pay if you do not want a game. So do we have to make games free? That's one approach, but how do we get a budget for the next project? It's tricky. I still think there is a way to make a game essential. I would like to create the title which would make people – in the case of network gaming – go online. I hope *Daytona USA 2001* will be this title. Whatever, come on developers – let's do it.

Toshihiro Nagoshi is president of Amusement Vision, formerly Sega subsidiary Soft R&D #4

Michael Powell
director, Particle Systems

You have to wonder. If a special pair of glasses were created to view the world in vectors and polygons, would this vision correspond to that of **Michael Powell**'s? He is the man responsible for bringing *Powerdrome* to the Atari ST and Amiga in 1989. As his first commercial project it was stupidly ambitious, but the 3D futuristic race game was a success, achieved great notoriety, and provided the blueprint for the game which would entice a generation of gamers to Sony's PlayStation: *Wipeout*.

But before specialised industry courses were ever available Powell was nurturing his fascination for 3D modelling with a degree in mechanical engineering. Time spent with games such as *Revs*, *Aviator*, and *Elite* also provided the inspiration for a role in the industry. "But the basic principles are still the same," he maintains. "One of the only differences was that we always wrote our own polygon rasterisers, which drew the basic polygon from left to right. That was a big part of how good you were and how fast the code was."

From a clunky school micro and bits of graph paper he has since gone on to create the building blocks which bind the *Independence War 2* (see p32) universe together. Yet the creation of polygonal worlds didn't always run smooth. "After *Powerdrome* I did a title which was never released," reveals Powell. *Cyberfight* was a robot beat 'em up along the lines of *Rise Of The Robots*. It introduced texture mapping and Gouraud shading to the PC but, **Edge** suspects, was to gameplay what Craig Charles is to intelligent analysis. "We spent a lot of time developing cutscenes along the lines of *Wing Commander*, but eventually it just dribbled out."

After *Subwar 2050*, *Vortex*, *Cholo*, *Warhead*, and *Evasive Action*, Powell established Particle Systems in Sheffield with partner Glyn Williams in 1996. His passion for the environments he creates is clearly discernible in every co-ordinate point and plane reference plotted in his games. "I like the science-fiction genre because you don't have to slavishly do what has gone before," he explains. "You can really let your imagination go. It's a shame that more publishers don't give developers a chance to do original stuff. I think it is quite a stifling environment for many developers when you can't get funding for anything different."

As for the Psygnosis version of *Powerdrome*? Powell is phlegmatic: "I know the designers drew inspiration from it. I don't mind – everyone takes ideas from places." His calm and unassuming manner remains as solid as the worlds he creates.

Photography: Martin Thompson

Edge's most wanted

Devil May Cry

Although Capcom Europe has been reluctant to release details, from what **Edge** has seen, this title looks set to reinvigorate the survival horror genre.

(PS2) Capcom

Sonic Adventure 2

The imminent arrival of the next chapter from Sonic Team has had members of the **Edge** team dusting off their copies of the first Dreamcast title in anticipation.

(DC) Sega

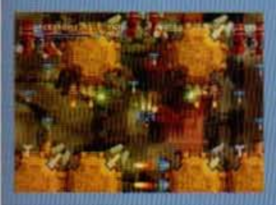
Startopia

A visit to Mucky Foot this month saw the developer's spacestation sim continuing to look impressive. This is far from just another instalment in the *Theme* series.

(PC) Eidos Interactive

Radiant Silvergun

The arrival of *Sin And Punishment* has prompted certain members of the **Edge** team to search the Net in order to complete their Treasure collections.



(Saturn) Treasure

Looking good

Harnessing improved graphics

With ever-more processing power at the disposal of developers, be it in the shape of a Dreamcast, PlayStation2, or in the future, an X-Box or GameCube, gamers are justified in expecting to see a raft of visually luxurious titles heading their way. *Soul Calibur*, *Jet Set Radio*, *Shenmue*, *ZOE*, and *Metal Gear Solid 2* – among many others – are sufficient proof of this. But just how important are fancy graphics when it comes to realising a gameworld that boasts an internal consistency and intuitive game logic?

The beautiful cutscenes and elaborate prerendered backdrops that characterise the *Final Fantasy* series on PSone pushed the machine to its limits and, together with sympathetic characters, apparently pushed some gamers to emotional extremes not usually associated with videogames. But, arguably, each of the three titles to have appeared on the unit so far are little more than interactive B-movies, offering linear paths, little in the way of gameplay, and a banal narrative.

By contrast, a title like *Secret Of Mana* (below) offered players the opportunity to exercise their own imaginations when it came to offering a fantastic world, and a lot more in the way of gameplay. More recently, incarnations of the *Zelda* universe have utilised graphics not as eye candy, but as an integral component of a gameworld that sucks players in. Instead of having to second guess the game's designers in order to work out what is possible within the game, the graphics do an admirable job of demonstrating this.

But as videogames boast ever-more realistic environments, the tension between ingame and realworld logic threatens to disrupt all but the most meticulously sculpted gaming environments. The structure of *Baldur's Gate II* is not too dissimilar to that featured in SSI's old AD&D adventures, albeit enhanced with a host of diversions and subplots and a polished graphical veneer. But the isometric viewpoint allows players to use their imaginations to augment the developer's vision. By contrast, *Vampire: The Masquerade*'s reliance on convincing 3D environments served only to highlight the prosaic structure and ridiculous inconsistencies of the game.

Ion Storm's attempt to merge console RPG-style playability with a fully 3D world courtesy of the *Quake II* engine is therefore an ambitious one, with many potential pitfalls. But if the graphics in *Anachronox* serve the game design, rather than dictate it, everyone will be better off.

Edge Of Chaos: Independence War 2

Particle Systems presents a graphically striking space trading title it hopes will topple *Elite* from its position at the top of the genre's tree after 16 years

The original *Independence War* game is still providing amateur coders with the impulse to modify. Particle happily encourages such interest

It may be 16 years old, but *Elite* still rules the galaxy when it comes to the space trading combat game. Advances in technology may have provided the ability to represent more colourful explosions and the possibility to support more dynamic gameworlds, but David Braben and Ian Bell's original title has not been matched in terms of its absorption into a working universe.

This is the element which Particle Systems has been keen to address. After the relative success of the first game, the team has concentrated on building a mission structure which allows the player some lateral movement but still provides a strong central narrative thread. The player takes the role of Cal Johnston, who, together with his mercenary team, must survive and thrive through piracy while keeping a close watch on events which are bringing the galaxy to the edge of chaos.

Trading and piracy will clearly play a major role, with more than 500 goods types in the game. Various ships can be stripped of their cargo, but it is the huge transport craft from which most of the precious cargo can be stolen. Once these transports have been disabled the cargo can be retrieved by Jafs (one of Cal's valued sidekicks) in a separate search-and-recovery vehicle owned by the team. Goods can be combined to create new technologies or used for bartering purposes. An email system at the squad's HQ also provides a window on the complex working universe which sees faction fighting faction and opens up mission options for the player to choose from.

Various ships can be stripped of their cargo, but it is the huge transport craft from which most of the precious cargo can be stolen

Although most missions are scripted, there will be many more which can be selected as side quests. These will not further the narrative, but will hopefully give the player a sense of freedom and help them acquire upgrades and important ship parts which would not otherwise be available. A variety of mission types are promised, and, as a comprehensive AI system plots the movements of all the space vehicles in the 16 star systems, experiencing the same events at the same locations is avoided.

There are more than 100 ship types in the game, and the player has the opportunity to pilot five very different command modules. Each has its own handling characteristics, and a vital part of the strategy is to choose which is the most appropriate for a given task. Customisation is possible with the developer promising thousands of combinations of weapons and equipment. Criticisms that the first game had an unwieldy interface have als

Format: **PC**
Publisher: **Infogrames**
Developer: **Particle Systems**
Origin: **UK**
Release: **March 2001**

Multiplayer capabilities will be added to provide longevity beyond the oneplayer experience. Expect spectacular dogfights to feature heavily

A working universe is being built around the central plot. The craft and factions which inhabit the universe should be seen going about their business independently of the player. Ships will be seen plotting orbits, going into holding patterns, and, vitally, unloading cargo at space stations – providing a good target for the player

been addressed. All commands can now be entered with a joystick through an intelligent HUD system, although shortcut key commands can be used if so desired.

On the surface the title doesn't seem to offer anything which has not been seen in the likes of *Colony Wars* or *Frontier*, but Particle Systems is doing things with a great deal of style and panache. The visuals in particular are tremendously realistic. "While many other games have used shiny surfaces, they tend to be unrealistically and uniformly glossy," points out lead programmer **Will Vale**. "In *I War 2* glass looks like glass, painted surfaces catch the light where the paint has been chipped away, and illumination maps pick up subtle variations in the surfaces when light shines across them."

The visuals are the first thing to impress; the second is the music which accompanies the action. Composed by Chris Mann, the haunting mix of orchestral instruments and sythesized effects serve to provide your navigation through the deeps of space with a truly epic feel. Nevertheless, the sum of these parts will rest heavily on the quality of the combat – a factor which is still difficult to assess. Shields can be angled to prevent enemy hits, and turret gun emplacements can be added to your command module for extra firepower. But this will be for nothing if the interstellar dogfights are not rousing.

The title is already near completion, and, interestingly, three months have been built into the game's development cycle just to balance gameplay. *Independence War 2* may not offer the open-ended universe which *Elite* fans crave, but the scale and strength of the plot in which the player becomes absorbed will no doubt prove to be a massive compensation.

Back home for a tune-up

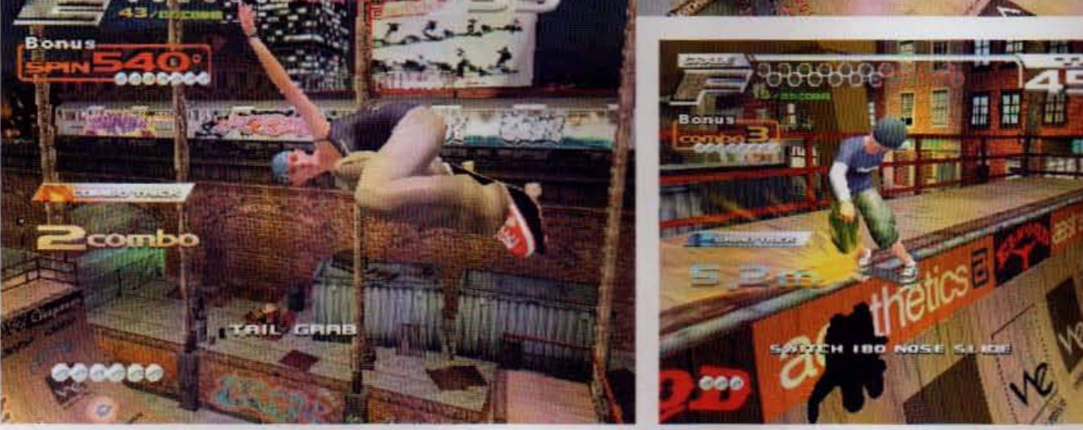
Back at the crew's HQ goods which have been acquired through fair means or foul can be used for useful enhancements. Weapon and ship upgrades can be fitted to the ship immediately, while other goods (which range from giraffes to edible fungus) can be bartered with via Jaf's network of contacts on the black market. Even seemingly worthless goods can be recycled to create more practical equipment.

Air Trix

Format: **Coin-op**
Publisher: **Sega**
Developer: **In-house (Hit Maker)**
Origin: **Japan**
Release: **January 2001**

It's back to the board as Sega revisits the days of *Top Skater* and introduces a coin-op with deck peripheral, daring arcadegoers to show their mettle and shoot the half-pipe

The levels boast some amazing geometry, and the spot effects – which include reflection and lighting – are striking, bringing the environments to life



While skateboarding games have progressed in leaps and bounds since Sega's 1997 release of *Top Skater*, the control set-up of *Air Trix* – a huge cabinet with a skateboard inset in it – is still the kind of thing that can only exist in the arcade. That's why, more than three years and several versions of *Tony Hawk's Skateboarding* later, the prospect of *Air Trix*, the spiritual successor to Sega's Model 2 skating success, remains a welcome one.

Air Trix features the same control system as *Top Skater* – in other words, everything is controlled by a skateboard you stand, lean, and jump on. The gameplay, however, is markedly different, as all the action takes place on a half-pipe, not a skate course. Gameplay consists of you trying to pull off tricks (which consist of grinds, spins, and different combo techniques) with various foot manoeuvres to help you earn medals. Some tricks will actually be offered as mission objectives – if you can complete them on your run, you'll earn bonus medals.

The visuals are also worthy of considerable note. Based on the high-end Hikaru board, they are simply astounding. The screenshots here should give you a hint of how great the game looks, but even they don't hold a candle to the actual game in motion, with its realtime moving lights and reflections. Come January, **Edge** is looking forward to giving this game a thorough test drive to see if it can, albeit maybe temporarily, dethrone the *Hawk* series and became the ultimate videogame skating experience.

Skating hardware

The *Air Trix* cabinet is an evolution of the hardware first used in *Top Skater* three years ago. This time around the skateboard itself is fully articulated and features a central pivot mechanism which allows players to perform spin manoeuvres. Moreover, rotating the board on approaching a ramp lip results in a grind.

Players can skate on three different stages, including one which serves as a training mode for those that need to acquaint themselves with the controls before heading for the half-pipe

Fear Effect 2: Retro Helix

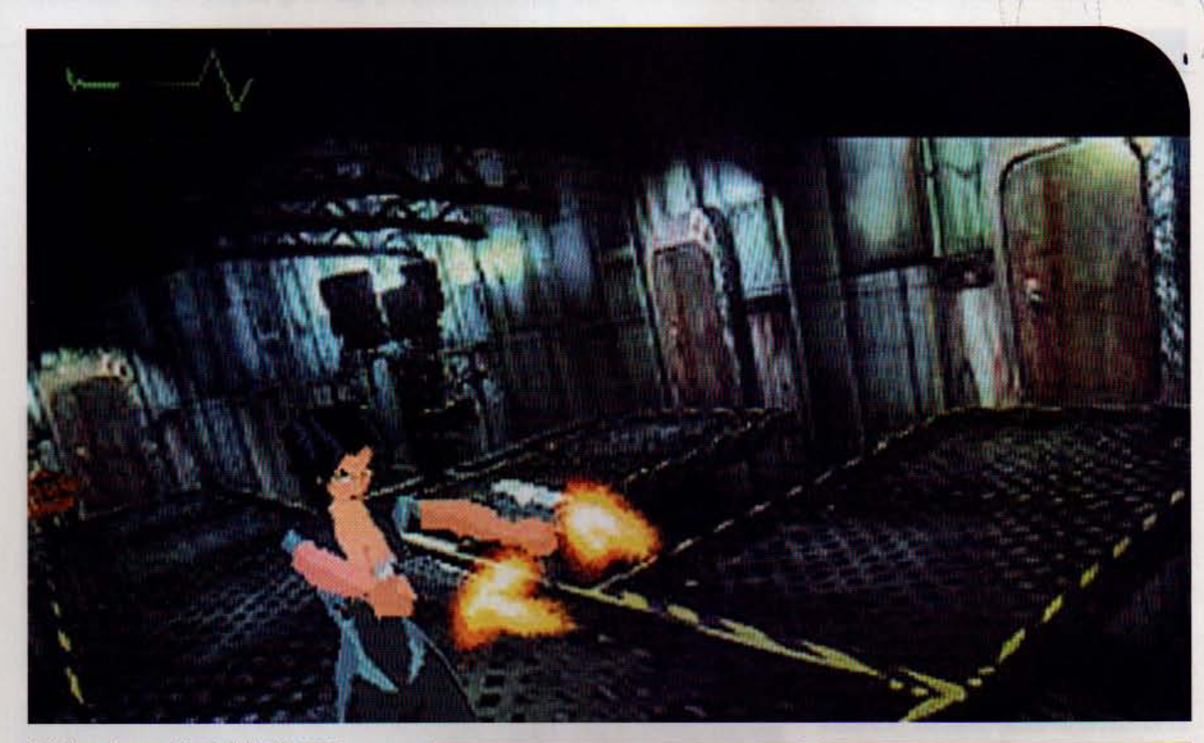
Format: **PlayStation**
Publisher: **Eidos**
Developer: **Kronos Digital Entertainment**
Origin: **US**
Release: **March 2001**

Hana returns to active service as developer Kronos attempts to iron out the problems with the last instalment of the series, slashing load times and improving cameras

Sampling the infuriation of instant-death game mechanics courtesy of *Dragon's Lair DVD* (see Out here) calls to mind a design flaw common many current titles: loading times. This oblem proved *Fear Effect*'s main flaw, and ough a well-crafted game surrounded such oments, it was a factor which discouraged any from sampling the charms of even the econd of the four discs the game was read across.

"We have worked very hard – and it as one of the main considerations when e began *Retro Helix* – to solve the loading mes issue," asserts the game's producer, **om Marx**. In response to consumer umbles, zero load times – even following eath sequences – have been promised for e sequel. Other key enhancements which larx is keen to implement include animated ackgrounds and the addition of 3D to the nvironments, rather than simple prerendered ackdrops. Such elements are already roving positive in gameplay terms. A D maze section, for instance, enables e player to navigate, stalk, and avoid nemies more effectively than having to ly solely on fixed camera positions.

The plot focuses on the origins of the *ear Effect* mercenary team, and as such erves as a narrative prequel to the first ame. Developer Kronos wants to onsistently surprise players throughout e game, and is revealing very little plot detail part from the fact that Hana, Glas, and Deke ust discover three separate items. And uess what? These items in combination have the power to prevent the onset of oblivion.



Multiple endings are being built into the game, and key decisions must be made at certain points

lay the game through again and the enemies will e completely different, offering new challenges

More than 60 enemies inhabit the seven unique locations, which range from a military base in Afghanistan to an impressively realised tomb of the first Emperor of China. The latter level in particular displays *Retro Helix* at its best. A combination of stealth tactics, problem solving and frenzied gun battles are required to successfully complete the stage. Both long- and short-range weapons can be found at key points in the game, and in traditional style require some thought before use. Not all enemies, for instance, will be affected by larger hardware – some may be better dispatched with EMP mines, the sonic boom, or the hand tazer. A mecha bot can even be climbed into and controlled at one point in the game.

"For me, *Tomb Raider* is too soft," explains Marx, and in keeping with the first game the title will draw on manga violence mixed with a good dose of Chinese mythology. Though the cartoon stylistics mitigate against some of the controversy, Kronos is having to alter the bloodier scenes considerably to comply with taste thresholds in certain territories, especially Germany.

Rain Qin (top left) is a new playable character in the game. She is closely tied to Hana, and their relationship is integral to the plot. A comprehensive range of weapons, more convenient save points, and better loading times should leave the player with more time to get on with unravelling the mystery of the missing three per cent of the Retro Helix. Manga staples including sex, massive explosions, and mutants all play prominent roles

Still-improving PSone graphics

The anime style of *Retro Helix* has afforded the developer the opportunity to seamlessly segue in and out of in-game action and FMV sequences. Although **Edge** is wary of lengthy cut scenes at the expense of gameplay, Kronos has managed to pull off the effect tremendously well so far. These are also some of the best visuals ever to have graced the PSone, confirming that there's more still be wrung from Sony's old set-up before developers head off en bloc towards the 128bit generation.

Anachronox

Format: [cut off]
Publisher: Eid[cut off]
Developer: Ion Sto[cut off]
Origin: [cut off]
Release: April 20[cut off]

It has been a rollercoaster ride so far for Ion Storm, but expectations are high for its third proper game, *Anachronox*, which promises to bring console-style roleplaying gaming direct to the desktop

Ion Storm president **Tom Hall** may not enjoy the same public profile as partners Romero and Spector, but he certainly has the track record to share their company. Co-founder of id software with the Carmacks and Romero, he worked on early titles such as *Wolfenstein 3D* and *Doom*.

With his mad professor eyes, brainiac forehead, goatee, and shoulder-length hair combo – together with a juddering laugh – he's got the role of the creative genius down to a fine art. "I had so many ideas in the shower, I had to install a wax board and crayon," he deadpans.

However, the idea for *Anachronox* (from noxious and anachronism, literally 'poison from the past') came to him elsewhere in the bathroom. "I have to have notepads everywhere," he explains.

Inspired by Japanese console RPGs such as *Final Fantasy VII* and *Chrono Trigger*, *Anachronox* relies on a modified version of the *Quake II* engine to bring the communal, character-based style of gaming to the PC. Oneplayer only, careful attention has been paid to ensure the learning curve isn't too steep. "I think people who aren't used to RPGs will get into it a little more, simply because it's not overwhelming at the start," says Hall. There will even be a digital secretary to remind players what they were doing when they last quit the game.

Seven playable characters are available, three of which can be grouped at any time. The anti-hero of the piece is Sylvester 'Sly' Boots, the archetypal unlucky private dick of the future. As per usual, someone's out to destroy the universe, and while the basic plot is hackneyed, it's Hall's implementation that makes *Anachronox* interesting, particularly its humour.

"Here's Grumpos," says Hall, introducing a character. Onscreen, a pensioner with a flowing white beard appear[s]. "He's a grumpy old man and one of his skills is the ability to yammer." Suddenly switching into squeaky Grandpa Simpson voice, Hall starts. "'Oh, my knee hurts. Have you seen the weather forecast today? Can you help me up those steps?' It's the first annoyance world skill," Hall proudly states.

If this makes *Anachronox* sound something like a cross between 'Spaceballs' and 'Blade Runner', then Hall would probably agree. One part cult cliché to two parts escapist fantasy, *Anachronox* is the missing link between PC and console gaming. While Hall admits he will be considering the possibilities for porti[ng] the title to 128bit consoles after the PC version is finished, the other project he's looking forward to is *Ape Escape 2*.

Interplanetary travel and an imploding universe are the basis for the straightforward plot. Look deeper, though, and the game has the potential to break new ground. Paco the Fist (above) – a superhero who has lost his powers – is one of seven playable characters

Quaking after all these years
It may be ageing technology, but *Quake II* is perfect for *Anachronox*. For one thing, the game only runs at 24fps so framerates aren't an issue. Modifications to the engine are extensive, too, particularly with respect to the animations. All the cutscenes are done ingame and feature lip-syncing and facial animation. This also means that the game's minimum specs are all-inclusive: P2 300 with Voodoo2

Sky Odyssey

Format: **PlayStation2**
Publisher: **SCEI**
Developer: **In-house**
Origin: **Japan**
Release: **March 2001 (UK)**

Planes, trains, and virtual repair bills – SCEI releases preview code of one of the more promising PS2 games from its ECTS showing

It's reasonable to view *Sky Odyssey* as SCEI's answer to *PilotWings*. After all, elements exist that appear borrowed from Nintendo's superlative and innovative game. Elements such as rings in the sky you can fly through, for instance.

Nevertheless, labelling this a simple *PilotWings* copy would be unfair, for there is more to *Sky Odyssey* than that. Its concept is that of a flight-based adventure: select an aircraft and embark on a voyage of discovery. Specifically, you're looking for the Lost Tower of Maximus, and you achieve this by completing a set of missions based around an archipelago comprising four islands. These are reasonably varied, requiring you to, among many other things, land on an aircraft carrier, reach a neighbouring island before sundown by riding high-speed thermal currents, retrieve an artifact from a cave, negotiate tight canyons, clear a mountain range, or reach a landing strip while leaking fuel, requiring you to refuel mid-flight by locating a kerosene-filled train.

Your rating at the end of a sortie is dependent on the time taken, the amount of checkpoint rings you have cleared, any acrobatic manoeuvres undertaken, and the amount of damage you've sustained. You also get the chance to select an upgrade for your winged craft, which then becomes available in the set-up menu – anything from new wings and tails, to better engines.

Aside from the main adventure you have a target-based game, a free-flight option, the possibility to view your aeroplane collection and upgradeable parts in Hangar, a Training mode, and interestingly, Sky Canvas – your opportunity to indulge in some sky writing.

Ultimately, however, *Sky Odyssey's* greatest asset in a videogaming world stuffed full of similar racing, FPS and sports experiences, is its originality. Prolonged play will reveal how it fares as a whole.

It won't surprise you to learn that although you start with a choice of only three planes, additional models appear as you fly your way into the game (above)

Two modes of control exist, with the more elaborate option offering full control over pitch and roll functions. The sense of flight is very well conveyed, with the various aircraft handling in a significantly different manner

At this stage, there appears to be a fair degree of diversity when it comes to mission objectives

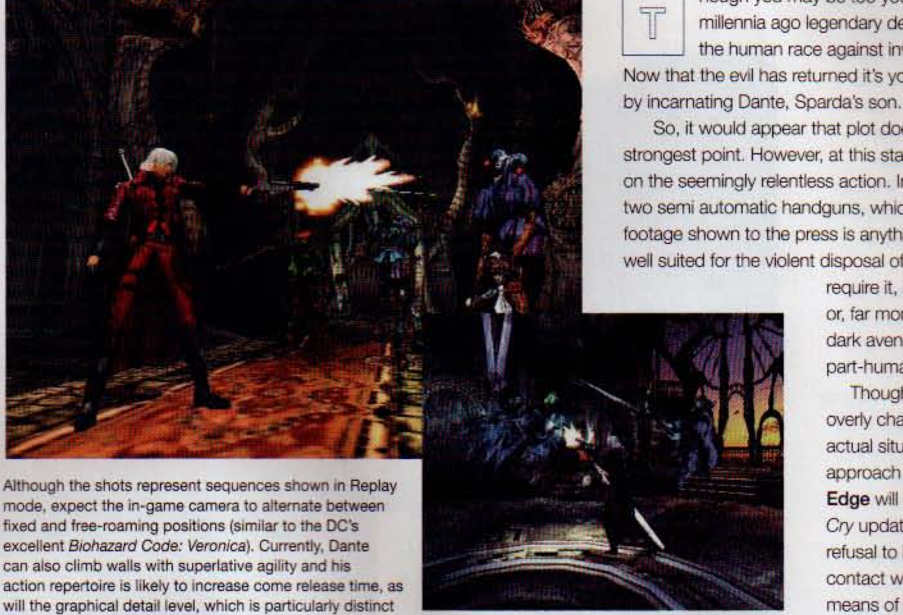
Structurally intact

An appealing aspect of *Sky Odyssey* other than the flight dynamics, which are competently conveyed, and the strangely relaxing though thoroughly compelling nature of the action, is the attention that has clearly gone into structuring it. Though you'd expect it to be, the main amusement is not linear – alternate missions appear frequently – and even the Target and Sky Canvas minigames are progressive in nature. In addition to this are the typically Japanese generous list of bonuses to discover.

Devil May Cry

Format: PlayStation
Publisher: Capcom
Developer: In-house
Origin: Japan
Release: Q3 2001 (Japan) Q4 2001 (UK)

Frenzied demon-slaying action from the latest Capcom creation to emerge from the minds which brought you *Biohazard*



Although the shots represent sequences shown in Replay mode, expect the in-game camera to alternate between fixed and free-roaming positions (similar to the DC's excellent *Biohazard Code: Veronica*). Currently, Dante can also climb walls with superlative agility and his action repertoire is likely to increase come release time, as will the graphical detail level, which is particularly distinct

Though you may be too young to remember it, two millennia ago legendary devil Sparda fought to protect the human race against invaders from the demonic realm. Now that the evil has returned it's your job to send it back to Hell by incarnating Dante, Sparda's son.

So, it would appear that plot doesn't appear to be the game's strongest point. However, at this stage that matters little. Focus instead on the seemingly relentless action. In addition to his sword, Dante has two semi automatic handguns, which, if the cleverly edited rolling footage shown to the press is anything to go by, appear particularly well suited for the violent disposal of hellish beings. Should the situation require it, Dante can resort to using his limbs, or, far more impressively, turn into a winged dark avenger – the advantage of a mixed part-human, part-demon heritage.

Though combat comes across as overly chaotic from the footage, expect actual situations to offer a more manageable approach to the struggles you'll engage in. **Edge** will endeavour to bring you a *Devil May Cry* update soon, despite Capcom Europe's refusal to let the Japanese office have any contact with western publications as a means of controlling coverage.

Vanishing Point

Format: Dreamcast/PlayStation
Publisher: Acclaim
Developer: Clockwork Games
Origin: UK
Release: February 200

Having momentarily spun off the console driving track, Clockwork Games' promising racer returns, hoping to carve a new road for itself

Project *Vanishing Point*, as it was known then, was first witnessed by those who bothered to look at the various monitor screens adorning Acclaim's ECTS stand in 1999. Shown then only as a rolling demo, it showed much promise. From a technical standpoint, at least.

Since then **Edge** has tracked the project's development, publishing a screenshot quartet in **E**79, before the developer turned up at this office in March with hugely impressive code for a prescreen (**E**83). It was also hugely ambitious. In fact, too much so, as it turned out.

The main mode of racing against 39 other drivers while 40 civilians make their way to work has now been removed, replaced instead by a lap-time-based system. Theoretically, there are still 80 cars going around the looped tracks (you only ever encounter a handful of them at one time, obviously), but how long you take to make your way from start to finish determines your overall position. Thankfully, as in *Colin McRae Rally*, your position is updated at checkpoints so the sense of urgency is maintained at all times.

The pleasing Stunt mode remains in place, car selection appears carefully determined, and handling is now much improved. Things are looking up.

The various cars are all licensed and as such don't feature realtime damage, which, as ever, is regrettable. Handling is still very skiddish (influenced by the team's love for the sublime *Sega Rally*), but things are now far more controllable than a few months back – it just takes a little time to get used to. Particularly impressive is the current sense of speed (Dreamcast version shown)

Kessen II

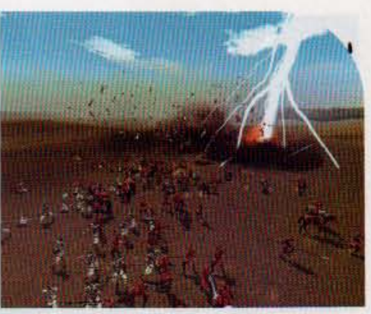
Format: **PlayStation2**
Publisher: **Koei**
Developer: **In-house**
Origin: **Japan**
Release: **Q1 2001**

Tabletop wargaming returns on PlayStation2, with armchair generals now able to take control of some 500 soldiers in massive arenas subject to dynamic weather effects

In Japan Koei dominates the charts with its PS2 historical combat titles *Dynasty Warriors II* and *Kessen*. Sales may not reach epic proportions in the west, but the company's insistence on sweeping FMV matched with grand battles will tap into an audience too old or too busy to arrange their own tabletop sessions.

Kessen II brings to the battlefield a stronger storyline, mythical magic, and greater depth of strategy than its forebear. The game engine has been upgraded to handle 500 soldiers in realtime (five times that of the original), and the arenas will be three times the size of those in *Kessen*. The mixture of troop manoeuvring and cutscenes will return, although battalions of 50 soldiers have now been assigned for ease of control and direction.

Dynamic weather effects such as lightning storms and earthquakes will also play a large role, and should add another dimension to the experience as a whole. The prospect of a mighty tornado cutting across the plains, sweeping up your force, and dumping their mangled corpses back on to the battlefield will strike fear into the heart of even the steeliest armchair general. If some of the control and interface issues are resolved from the first title, *Kessen* is sure to delight a legion of tabletop gamers.



Move, Gather, Disperse, and Magic commands will now be available to the player. The magic in particular takes Koei back to its roots in the *Three Kingdoms Romance* mythology. Spells must be used very judiciously, as powerful effects can have an adverse impact on the morale of your troops. Allies will also make appearances at key moments to boost the effectiveness of your force

Bloody Roar 3

Format: **PlayStation2**
Publisher: **HudsonSoft**
Developer: **8ing Raizing**
Origin: **Japan**
Release: **Q2 2001**

Forget the Incredible Hulk – *Bloody Roar* is back, and while the latest instalment is more elegant, with full 3D and new moves, you still don't want to make it angry

Improved graphics and lighting effects are a given, but 8ing Raizen will really need to concentrate on balancing gameplay effectively if *Bloody Roar 3* is going to challenge titles already out on PlayStation2. The fantastical beasts which the human opponents can transform into range from giant lizards to mythical flying creatures. Each will bring with it a ridiculous array of supercharged combos

The idea is a brilliant one. Fight one on one with a human opponent until enough rage and energy has been stored up to transform you into a freakish animal. The alarming special moves which such an alteration bestows is limited only by the imagination of the creators. Unfortunately, poor balance and execution have marred this central premise with previous *Bloody Roar* iterations.

8ing Raizing is hard at work pulling these elements together to make *Bloody Roar 3* a more convincing beat 'em up. Stages will now utilise full 3D, and this should become an integral part of the player's strategy. Slamming opponents against walls and obstructions will be possible, and animated backgrounds should make for more atmosphere. The 'Beast Charge' gauge returns, but more outlandish combos are promised. Flying creatures will be able to mount aerial attacks, while two new characters will become available from previous versions.

There is still some way to go until Hudson's coin-op conversion hits the shelves, but the extra characters, interesting special moves, and the promise of balanced gameplay should provide some opposition to *Dead Or Alive 2* and *Tekken Tag Tournament*.

Bomberman Land

Format: PlayStatio
Publisher: Huds
Developer: In-hou
Origin: Jap
Release: Out now (Japan) TBC (U

A decade and a half since he exploded on to the videogame scene, Bomberman is set for a comeback, with developer Hudson keen to introduce a roleplaying dimension

Chisling facsimilies of yourself out of rock (right) and ascending palmtrees to retrieve balloons (left) are just two of the bizarre mini games which Hudson is bringing to the package. The RPG elements, however, should bring a much-needed incentive to the oneplayer experience. Unlocking extra features in the theme park and travelling across the *Bomberman* globe will provide greater interest

It has been 15 years since Hudson brought the frantic action of *Bomberman* to a videogame console. To celebrate his birthday the developer is expanding the central bomb-detonating premise by introducing an RPG element to the franchise. Fortunately the 2D aesthetic has been retained (conversion to 3D on the N64's *Baku Bomberman* did not work so convincingly).

The multiplayer aspect which made Bomberman such a favourite to fall out over returns, and Hudson promises extra features and power-ups. But it is the RPG feature which is more interesting. A massive 80 stages covering five zones will make up the bulk of the game. Each zone relates to a colour: blue, red, yellow, green, and whi and each level layout is randomly generated to promote replay.

Other bombermen can be met on your travels, and a theme park will provide another source of entertainment. Enter the park and a bundle of minigames become available, with others to be unlocked once each zone has been completed. *Bomberma Land* is an interesting proposition on the PlayStation, but even more eagerly anticipated is a Game Boy Advance version for 2001, which promises to be fully network compatible.

Guitar Man

Format: PlayStatio
Publisher: K
Developer: In-hou
Origin: Jap
Release: Q1 2001 (Japan) TBC (L

Koei follows *PaRappa*'s lead and drafts in a celebrated Japanese illustrator to provide the look for its new rhythm-action title, which will be decidedly plot-driven

Japan's PS2 market has recently been flooded by music games from Jaleco, Enix and Tecmo, but it's Konami which has always dominated the world of rhythm action, with PaRappa and Lammy being the only cartoon heroes able to break their Bemani stranglehold. This success was arguably due as much to the strikingly warped artwork of Rodney Greenblat as much as Matsaya Matsuura's music, something that might well have inspired Koei to hire famous Japanese illustrator '326' to work on its upcoming music title *Guitar Man*.

Each level is split into two phases. The first is an exploration mode, with the player being subjected to a heavy-handed tour of the level. In the second, the player encounters the stage's boss, with gauges representing the health of each competitor.

Unlike most of the genre (Matsuura's work excepted), the game is strongly plot-driven, with a variety of characters aside from the bosses being encountered en route to the end. Because of a recent structural redesign, it's unclear as to how the music component of the game is actually going to play, but the fourplayer mode is sure to send the more sociable rhythm-action fans into some kind of jamming rapture.

Stylish visuals, or just an everyday snapshot of a Japanese suburb? Despite the lack of any details on the form the axe wielding will take, *Guitar Man* looks set to bring innovation at least in terms of its imagery

Severance

Format: **PC**
Publisher: **Codemasters**
Developer: **RebelAct**
Origin: **Spain**
Release: **January 26 2001**

As RebelAct's visceral dungeon-based adventure careers towards release, the meat of the title has yet to measure up to its superlative lighting effects

It's laudable that so many PC developers are seeking to push boundaries, and *Severance*'s 21st century barbarian overtones certainly do that, albeit in a way that's likely to offend more than impress. Codemasters' acquisition of the RebelAct title hasn't served to tone down the violence in the slightest, with the only concession to squeamish gamers being the parental lock on gore. Swift slices from your broadsword detach enemy limbs with sickening ease, while gushing wounds scar your torso and drip red texture dye all over the dungeon floor.

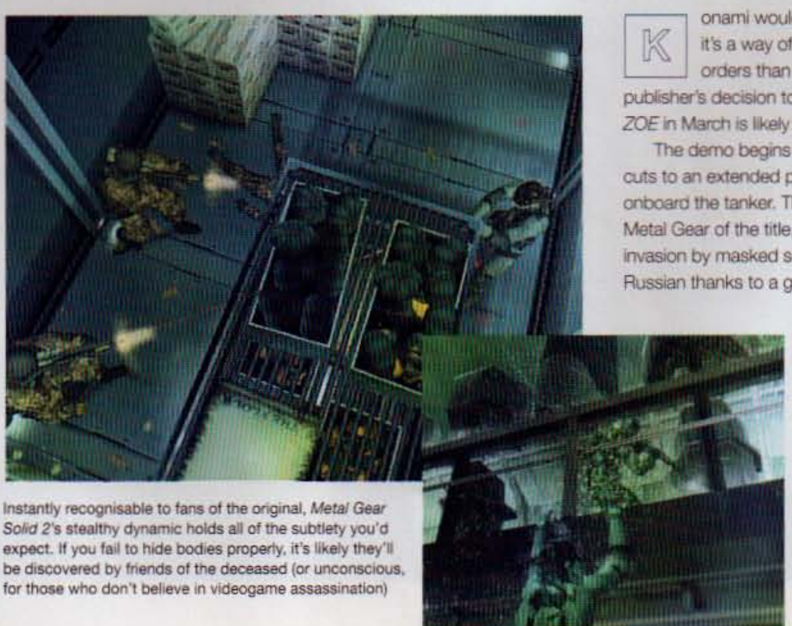
Strange, then, that as reported in **E**89, the truly astounding feature of *Severance* has nothing to do with bloodshed. The lighting effects are still astonishing, with realtime rendered shadows rendered from multiple (often moving) light sources adding a huge amount of atmosphere. Unfortunately, the game is badly wounded by a poor control system and an unfathomable (though reconfigurable) keyboard layout, which makes the psychotic *Tomb Raider*-esque dynamic somewhat exasperating. It's a problem that's potentially resolvable, though such an early 2001 release date means **Edge** is sceptical about whether *Severance* will end up being anything other than bloody frustrating.

Blood, dismemberment, and gorgeous shadow effects encapsulate *Severance*'s rather specific charms. Any object that can be picked up can also be used as a weapon, so bludgeoning someone to death with their own limb is a very real possibility

Metal Gear Solid 2: Sons Of Liberty

Format: **PlayStation2**
Publisher: **Konami**
Developer: **In-house**
Origin: **Japan**
Release: **Q3 2001 (Japan) TBC (UK)**

Konami elects to include a playable demo of its highest-profile title with *Zone Of The Enders*, and new screenshots and information on gameplay emerge



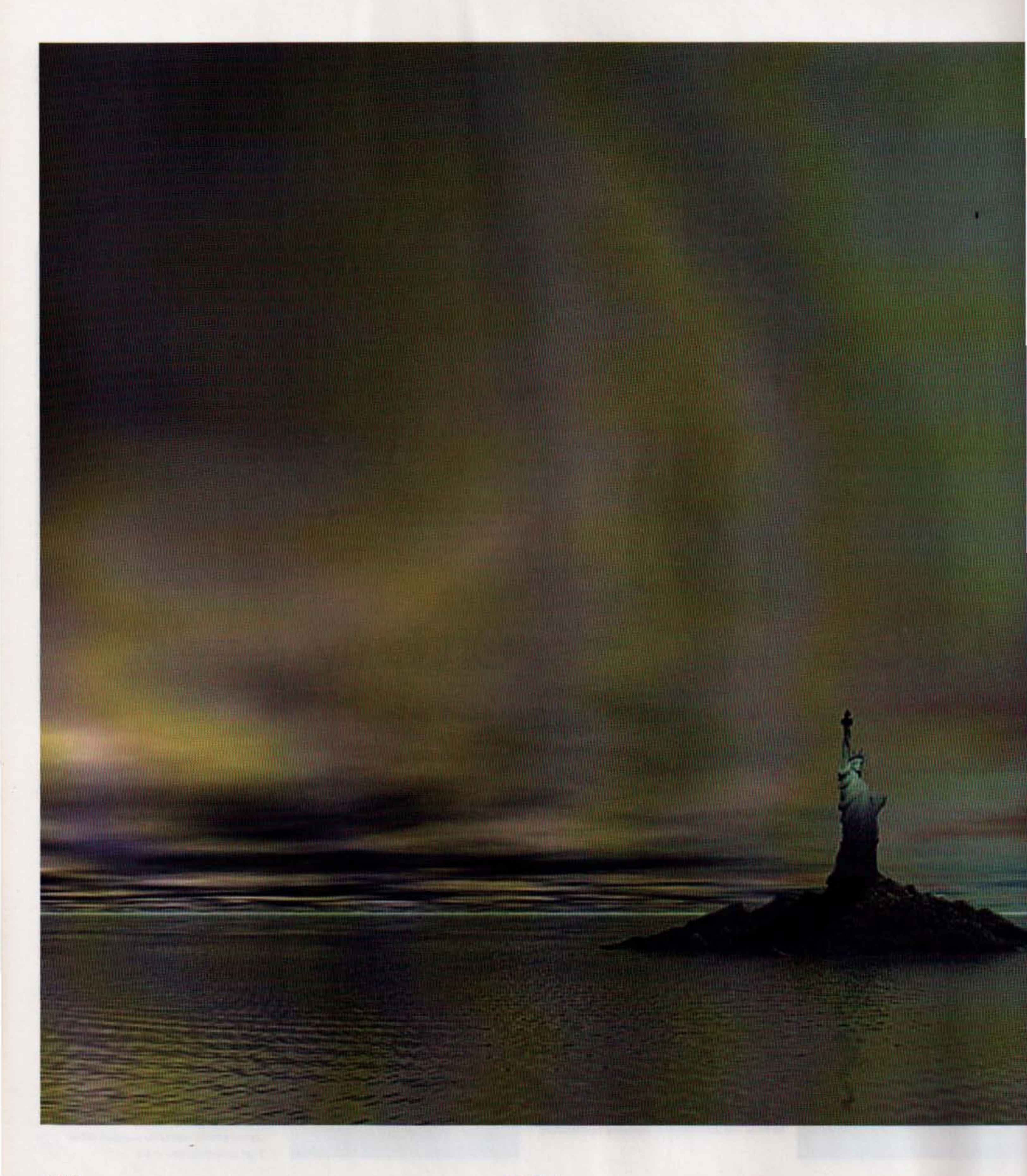
Instantly recognisable to fans of the original, *Metal Gear Solid 2*'s stealthy dynamic holds all of the subtlety you'd expect. If you fail to hide bodies properly, it's likely they'll be discovered by friends of the deceased (or unconscious, for those who don't believe in videogame assassination)

Konami would say it's a gift to the fans; cynics would say it's a way of ensuring *Zone Of The Enders* gets more pre-orders than perhaps it deserves. Regardless, the Japanese publisher's decision to ship a playable demo of *Metal Gear Solid 2* with *ZOE* in March is likely to placate the Snake-o-philes for a little while.

The demo begins with the footage seen at E3 and ECTS, then cuts to an extended piece of FMV showing Snake observing marines onboard the tanker. The tanker is believed to house the amphibious Metal Gear of the title, and following an unexpected, ruthlessly clinical invasion by masked soldiers (who our monosyllabic hero suspects are Russian thanks to a giveaway haircut), the game proper begins.

Unsurprisingly, it's a high-res version of the same stealth-and-snipe action that marked the PlayStation version, starting with Snake using a tranquilliser dart to send an unsuspecting guard to sleep.

Improvements include the graphically impressive option of an always-available firstperson perspective, and an increased range of moves for the main character. Splashing puddles and dripping blood add to the next-generation atmosphere, but the game remains resolutely a sequel rather than an entirely new entity.



Starpeace

There are countless fantasy-style persistent worlds being launched online, but French company Monte Cristo's business-based universe has the potential to eclipse them all with a hugely ambitious blend of gaming genres

While it's virtually impossible to find anyone in the game industry above the level of teaboy who doesn't think the future is online, few publishers are taking the new era as seriously as tiny French outfit Monte Cristo. You may justifiably ask just who they are.

Despite the fact that none of its management sims have ever graced the pages of **Edge**, that's about to change. Monte Cristo's online city-building game *Starpeace* is the most ambitious persistent universe **Edge** has witnessed – and that's in both the good and bad senses of that overused phrase.

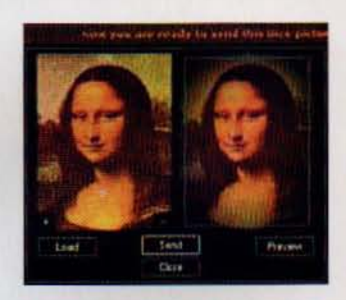
In its present incarnation, it's easy to be sceptical. *Starpeace* is an isometric 2D sprite-based game that runs in a modified *Internet Explorer* browser. Like most management games, the player starts with a certain level of resources, builds some facilities, does some deals, and hopefully makes money. Add a dash of politics, and it's possible to run for city mayor and gain extra powers. The cycle can then continue on a city, regional, country, planetary, and even universal scale, depending on level of success gained. Certain to be popular with Germans, but what's the big deal? Look beyond this basis, though, and a different picture emerges.

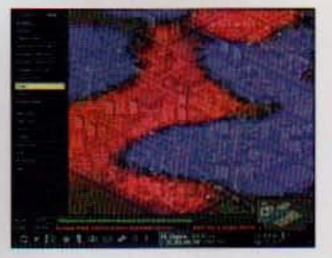
"The idea was to build a storyline and universe and fill it with as many subgames as possible," explains producer **Jerome Cukier**. "In *Starpeace* the core component is economic, which is good because it makes everything coherent. And then we are going to merge this with an action game so people can actually

The server updates the gameworld every one-and-a-half seconds, but the bustling cars and balloons are included for purely cosmetic reasons, and play no real part in the game

Format: **PC (online only)**
Publisher: **Monte Cristo**
Developer: **Oceanus**
Release: **Out now**
Origin: **Canada/France**

Photography: **Nick Wilson**





In true socio-economic style, the blue areas (above) are the profitable ones to be operating in thanks to their lack of crime

Jean-Christophe Marquis
co-founder, Monte Cristo

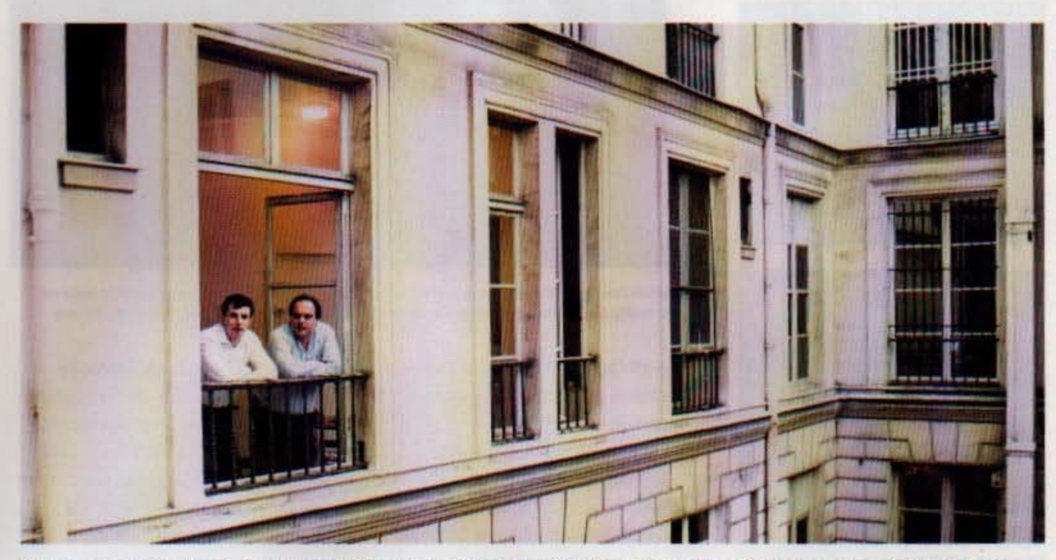
Jean-Marc de Fety
co-founder, Monte Cristo

walk in the city and fight. Then we are going to add stories like in RPGs." Starting to get the picture?

The first addition to the game will be the so-called 'illegal' subgame, where you can use your money to train a group of criminals and assign them missions such as the assassination of business rivals. And while this is an extension to the basic economic core, it will still labour in 2D. The scale of Monte Cristo's ambition only becomes clear when Cukier adds: "We actually have a 3D engine in development for the universe." What the company is attempting, in its own way, is the creation of a virtual online universe that spans game genres.

"3D is cool because you can walk in the city and you can go in and out of the buildings," Cukier boasts. "Suppose a guy wants to bazooka a building. He can do it and its owner will lose the building in realtime." The promise is part *SimCity Tycoon*, elements of *Quake*, and a hefty dose of the massively multiplayer aspect of *Ultima Online* – well, in theory at least. In practice, obvious issues arise – what game engine can deal with such variant game styles, at what speed, and even if one could be developed, who would want to play a game of such diverse styles? The rule of thumb in game design is that great games are the ones that are focused on one area. Think the types of people who play *SimCity* and *Quake*. There just aren't that many gameplaying psychotic town planners out there. And until the 3D engine is demonstrated, it isn't a given that this particular ambition can be realised, either.

What is praiseworthy, though, is the level of the ambition. Imagine it: controlling a *SimCity*-style empire with your buildings reaching up to the skies and then going firstperson, grabbing a rocket launcher and heading out to waste a business rival's new penthouse.

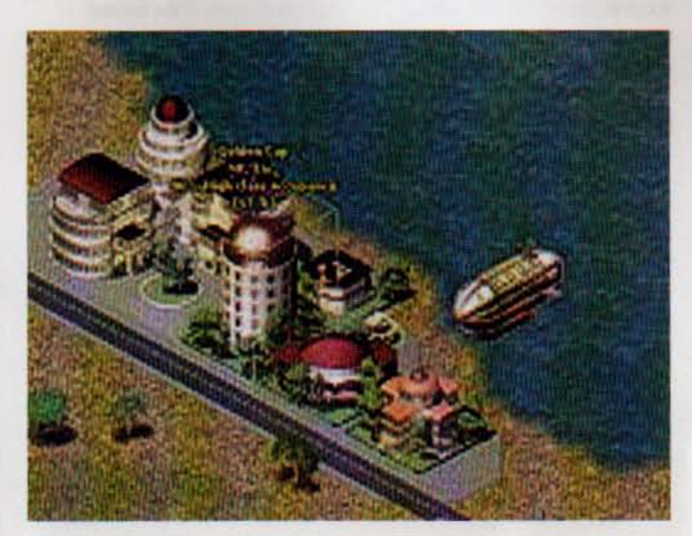

As well as *Starpeace*, Monte Cristo has seven other online games in development. The company secured $5m from venture capitalists to set out its stall, and sees the investment as a long-term issue, readily acknowledging that it is unlikely to make money given the current online market

Speculate to accumulate

"At the moment we have 40 people, but we plan to have 100 people focusing on online technology by the year 2001," explains Monte Cristo's co-founder **Jean-Marc de Fety**. Formerly a vice president at merchant bank Credit-Suisse First Boston, he knows the company must aggressively position itself for future success. It recently secured $5m from venture capitalists to invest in its online strategy. *Starpeace* is the first fruit of that drive. The company has seven other online titles in production at present, although none possess the same scope.

"I don't think the online market is here yet, but to make profit we need to be in this business. No one is making a profit yet," de Fety explains. "We need the knowhow and the technology." *Starpeace* is actually being developed by Canada-based

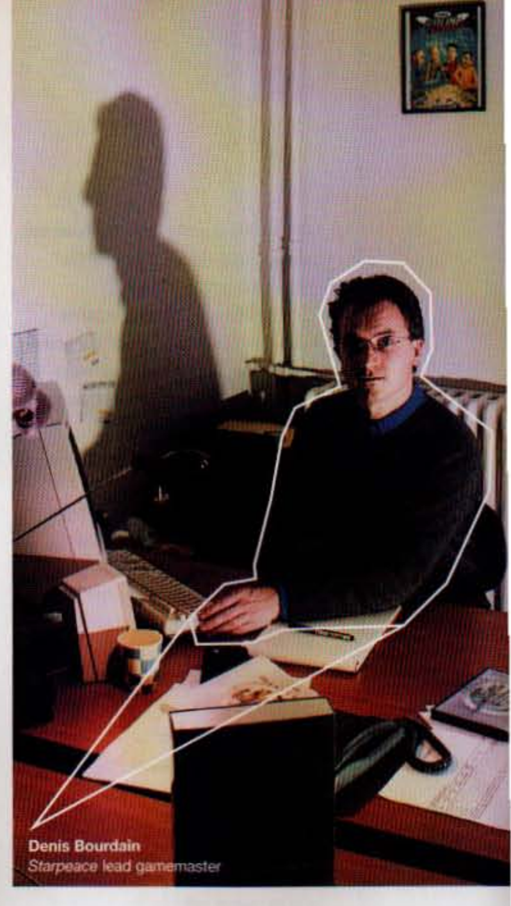
"In *Starpeace* the core component is economic, which is good because it makes everything coherent. And then we are going to merge this with an action game so people can actually walk in they city and fight. Then we are going to add stories, like in RPGs"


The first activity after selecting a planet is to create a company linked to one of four trading seals. A headquarters built in the seal's architecture and access to its technology is the result

Click on any building (above), and its hourly profitability and efficiency can be reviewed, no matter who the current owner may be

A complex economic model underpins *Starpeace*, which results in a huge mass of statistics being generated to track the progress of each player's empire

While the scale of the game is not massive, future updates will enable players to operate on a multitude of different planets. At present they are limited to making it big on just the one

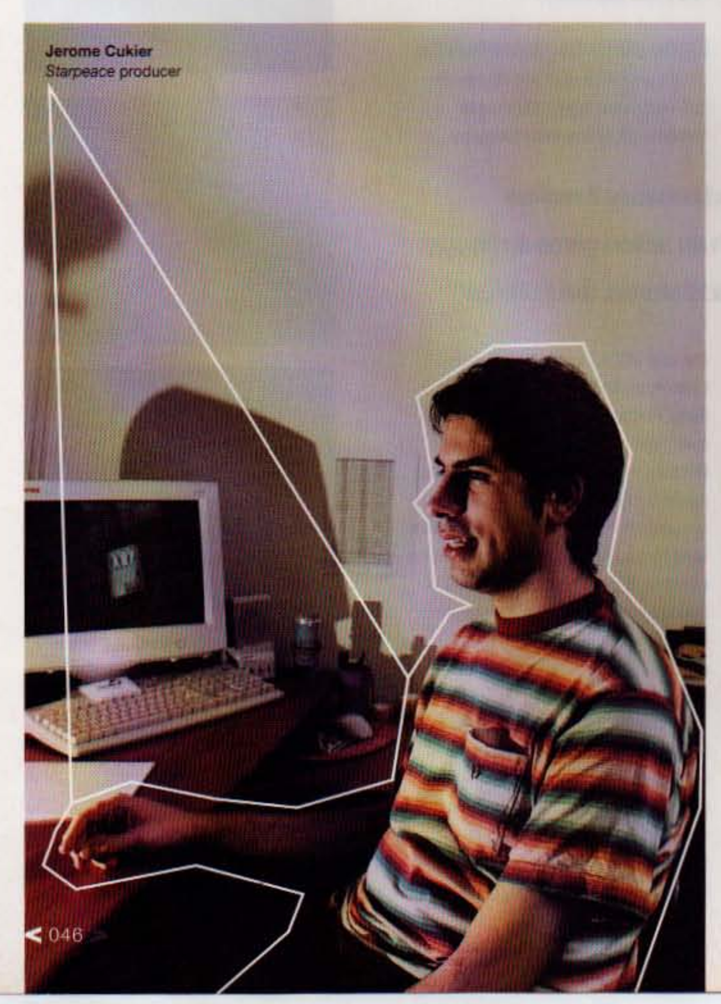


Denis Bourdain
Starpeace lead gamemaster

outfit Oceanus. The rest of Monte Cristo's games are being worked on in its Paris HQ.

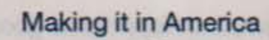
However, de Fety's position begs the question: if he doesn't reckon that the likes of *Ultima Online* and *EverQuest* are generating cash with 200,000 and 300,000 monthly subscribers respectively, how does he expect to? "We are cheaper," he states boldly. "Games like *Ultima* and *EverQuest*, their costs are $10 million for development. *Starpeace* is only $1 million."

"We are also working on new ideas of strategy," adds Monte Cristo's other co-founder, **Jean-Cristophe Marquis**. This is particularly important if persistent games are to appeal to massmarket gamers that won't want to check on their progress daily. "You don't have necessarily to be online during the battle," Marquis says. "If you have put the right units and the right people in the right positions, you will win the battle." The same line of thinking underpins *Starpeace*. Originally it was thought that staying online for eight hours a day would be all that was needed to succeed. "I play twice a week and I'm doing OK," shrugs Cukier.



Jerome Cukier
Starpeace producer

"I think it is our duty as a small company to show what the future is, otherwise we don't have anything to say. If we stick to what the big publishers are doing, there won't be room for our own products out there"



Making it in America

Just launched in Europe, following a year of beta testing, *Starpeace* will be released in the all-important US market early next year. "We want 100,000 players, but we would be happy with 30,000, because that makes it profitable," explains de Fety.

Around 1,000 players inhabit any planet in the *Starpeace* universe, with each planet run on an individual server. And although *Starpeace* is no twitch game – the universe updates only every 1.5 seconds – it is demanding on the server side, consisting of more than one million lines of code. Obviously, all the economic statistics of a planet must be kept up to date, whether a player is online or not. On the other hand, the client side of the game is relatively thin, with Cukier estimating the executable to be less than 1Mb. The minimum specs needed to run the game are low too – requiring a P133 with a 2Mb graphics card and a 33Kbps modem.

Apart from the technical problems, running a persistent online game throws up a multitude of new issues for developers to deal with. One of the main ones for *Starpeace* is how upgrading the game will change the gameplay, which seems likely to alienate some of the fanbase. "Whenever we introduce a change of any sort, even the person who asked for it will say: 'It was better before'," Cukier groans. "It is very tricky."

But that's the problem with ambition: it's never straightforward. Like the rest of the industry, the next year will see Monte Cristo grappling with a steep learning curve. To compound matters, it wants to take *Starpeace* on to game consoles by 2003. There's also the issue of the WAP functionality it's planning. But, as de Fety says: "I think it is our duty as a small company to show what the future is, otherwise we don't have anything to say. If we stick to what the big publishers are doing, there won't be any room for our own products out there."

Photography: **Martin Thompson**

Inside...

Mucky Foot

The Guildford-based independent developer's first title, *Urban Chaos*, enjoyed a positive critical response but bombed at retail. Now the company founded by former Bullfrog employees is taking a somewhat different approach. Edge talks to the directors about their apparent change of direction

Games are the new rock 'n' roll. Not in a chic sense, naturally, although the Larafication of massmedia might suggest that's on its way. But, as the music business tears itself apart under the weight of MP3, gaming becomes bigger business with every franchise-filled Christmas. Both industries have those who see their output as product, and those for whom it's their passion, and the gap between the two schools of thought gets wider by the week. Both sets of charts are filled with novelty acts, subtle reworkings of old hits, predictable releases from established names. And, depressingly, the rare breakthrough successes in each do nothing to reinstate the confidence of the non-casual consumer – those who are well aware that success is no longer a measure of quality; it's a measure of marketing, the strength of a brand.

Hunt around on Mucky Foot's Web site, and you'll find a secret link that sends you to a mocked-up music magazine cover starring the four directors as nu-metal gods. This may be a joke aimed more at over-dramatic promotional photography then Mucky Foot's image, but one that's absolutely appropriate to their position as an independent developer raging against the corporate machine. They've never done franchises, they don't do sequels. They're not sell-outs. They just want to make games.

They've also got the necessary dislike of all that surrounds the increasingly management-heavy industry. Three of the company's four directors – **Gary Carr**, **Mike Diskett**, and **Fin McGechie**, all former Bullfrog employees with illustrious gaming CVs – sit quietly, ready to make an announcement concerning Mucky Foot's mystery next-generation title. The fourth director, Guy Simmons, doesn't attend the interview. He's the personification of the directors' collective frustration, remaining

Guy Simmons
director

Mike Diskett
director

Gary Carr
director

Fin McGechie
director

FAQ

Company name: Mucky Foot Productions

Founded: 1997

HQ: Guildford

Number of employees: 30

Softography: *Urban Chaos* (PC, PS, DC)

Projects in development: *Startopia* (PC), *Blade 2* (PS2)

in the shadows and continuing to tweak and twist the title while the others spoonfeed each journalist who arrives ready to cast a critical eye over the company's second game, *Startopia*. In an interview with trade publication *CTW*, Gary Carr declared that the person he'd most like to be stuck in a lift with was a game journalist who once gave a caustic reception to *Magic Carpet 2*. It seems they take the stance that Mucky Foot creates, reviewers destroy.

Selling out to The Man

Diskett glances at the others, and, working pauses into the sentence for dramatic effect, announces the news: "We're working on new game for Activision, and it's the game of the movie of the sequel to 'Blade', so, er, it's the game of 'Blade 2'."

They've sold out.

"We're not really sure when the movie's coming out, but it's around March 2002." Mucky Foot, creators, designers, and rock 'n' roll independents, are working on an Activision film licence.

"It'll probably come across to every platform going, but initially it's going to be PS2 only. It'll launch on PS2."

They've sold out.

Maybe it's not all that bad, because, as McGechie points out, the film licence isn't what it once was: "We've definitely moved on from the '80s, where Ocean used to knock out 37 films in a month – *Contra*, *Total Recall*, *Robocop* – all the same, all platformers."

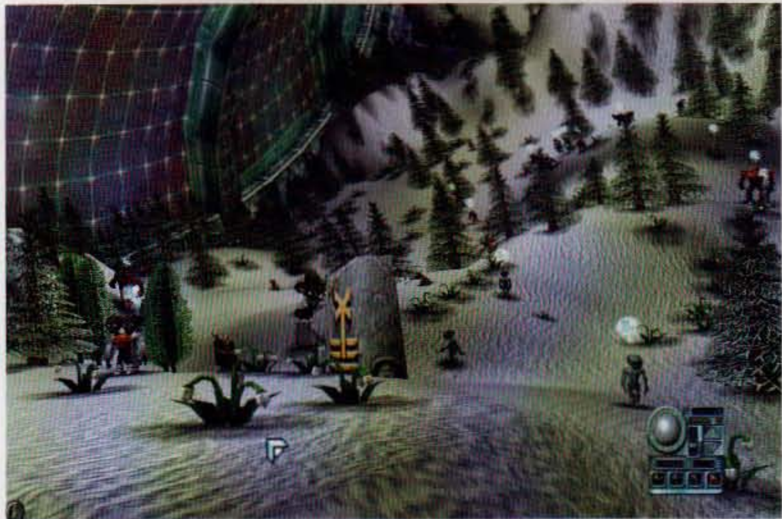
Carr continues: "If the game's right and the licence is good, they help each other. No one would say that *GoldenEye* did well because of James Bond. It was just a good game."

"In a way," Diskett adds with a grin, "we almost feel like we're working on the sequel to *Urban Chaos*, because it's a similar style."

It all sounds slightly apologetic, but they have a point. Limitations always manifest themselves, somehow. Get rid of preconceptions caused by 15 years of terrible licences, and Mucky Foot's newest project sounds less like a betrayal, and more like good business. Carr certainly sees it as a breakthrough for the young company: "It's a major thing for us, really, because Activision in the US were obviously very keen to give it to a US company, but they were very inspired by *Urban Chaos* having the sort of gritty feel they were looking for. They'd heard of us through that – we were the guys who they felt were going to expand upon that sort of style – the sort of near-future gritty feel of the first movie.

"The thing is, this is different. It's the first time any of us have ever worked on anything that isn't our collective idea. It's a different discipline, and it's quite interesting because we're going to be limited as to what we can do because of the plot, but we've been given as much freedom as is possible within that. The actual level design and the concepts are all down to us, but it is going to be quite an interesting discipline to try and read something original out of something that's been created as a Hollywood movie."

"We're working on a game for Activision, and it's the game of the movie of the sequel to 'Blade', so, er, it's the game of 'Blade 2'"



The inner deck of the *Startopia* torus contains an ecosystem which can be used for entertainment or profit. Temperature, humidity, and terrain and water levels can all be altered, and wildlife will respond accordingly

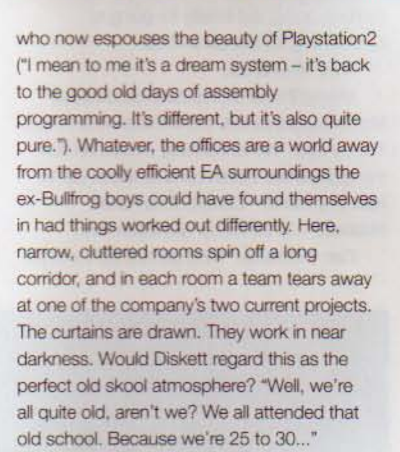
Getting nostalgic over PS2

Mucky Foot's great Snipes hope, *Blade 2*, will appear first on the PS2, but not until 2002. Does this show Mucky Foot's confidence that, despite teething troubles, PlayStation2 will emerge all-conquering? "Oh yeah, definitely," replies Diskett. "The idea that PlayStation2's going to fail is just X-Box wishful thinking. Looking at reality, Sony just won't let it fail."

Carr states the company's position a little more cautiously: "As developers, we have to take risks all the time. We can't just go, 'Oh, we'll wait and see. Oh, it did quite well, didn't it? Well, never mind, we missed that boat.' I mean, we take risks. If you look at every piece of software we've ever done, and every platform we've ever put it on, it's not always been the right platform at the right time. But we have to go with whatever we think's going to do well.

"Besides, I think a lot of the negativity is down to the fact that to initially Sony were quoting like 150 million polys a second, and then everyone thought they were failing because they were only achieving ten million a second. Whereas ten million to 15 million's the actual figure you could do with in most situations. So, yeah, it's incredibly difficult to try and reach the hyped figures they put out at the start, but in fact it's not that difficult to put together something that looks realistic."

Diskett believes there are also negatives when it comes to developing for Microsoft's new system: "With X-Box, you've got DirectX. And you have meg after meg of documentation on just understanding DirectX, which is between you and the hardware. With the PlayStation2 you just get a few dozen pages about the hardware, and it's all down to you to code for it. So it to me it's quite refreshing, it's like harking back to the good old days."



Ten different lifeforms exist in the *Startopia* universe, each with their own race-specific personality traits. Carr recounts one moment where, when a fight breaks out in the maintenance deck, one of the characters nearby goes into a 'blind panic routine', collapsing and burying his head in his hands. Until he witnessed it happen, he had no idea that the routine existed at all

The indie ethos

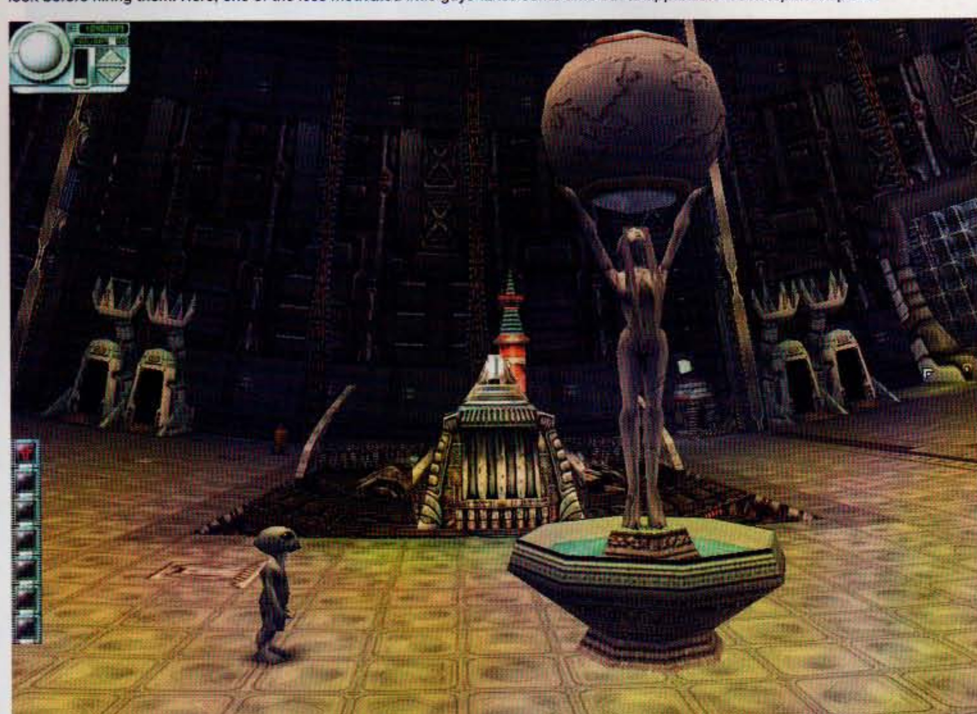
Diskett, too, is adamant that the limitations won't effect Mucky Foot's independence: "In terms of creativity, we are limited in that it's a film, so there are aspects of the plot we can't reveal, and there are things we can't do with the main character. It is limiting, but it's no more limiting than any other game. You can do any game with any publisher and they're going to be on your back. You've still had a loss of creativity because your publisher is pressing you and saying: 'Well, I don't like that aspect, you've got to change that."

Based in a retail park in Guildford, Mucky Foot's working environment takes the bedroom coder aesthetic to its logical conclusion. Maybe some of that comes from Diskett himself, who grew up coding for the Vic-20 and writing Amiga shareware software, and who now espouses the beauty of Playstation2 ("I mean to me it's a dream system – it's back to the good old days of assembly programming. It's different, but it's also quite pure."). Whatever, the offices are a world away from the coolly efficient EA surroundings the ex-Bullfrog boys could have found themselves in had things worked out differently. Here, narrow, cluttered rooms spin off a long corridor, and in each room a team tears away at one of the company's two current projects. The curtains are drawn. They work in near darkness. Would Diskett regard this as the perfect old skool atmosphere? "Well, we're all quite old, aren't we? We all attended that old school. Because we're 25 to 30..."

"... Five," interrupts Carr. "But it's more than our age, it's that most of us have been in the industry from the mid-'80s, so we're old in

The torus provides a unique playing field for *Startopia*'s levels. Disorientation is prevented by having the game camera fixed to an orbital track, meaning gamers are rarely dizzied by the peculiar nature of the structure

Greys often make good scientists, but since each character possesses their own statistics it's always wise to have a closer look before hiring them. Here, one of the less motivated little guys takes some time out to appreciate a *Startopia* sculpture



that respect. We have a lot of experience that we don't want the industry to forget, and we want to evolve that old working ethos into 2000. We need to think forward, but we don't want to chuck away everything we've learnt."

They're utterly independent, too, a difficult thing to achieve when publishers are so keen on adding to their armoury of exclusive developers. "It's really important that there aren't so many levels of management," explains Carr. "Mike's a director, and he's also the lead programmer on our PlayStation2 project. I'm a lead artist, Fin's a lead artist. We all chip in, and still do what we did ten or 15 years ago. Because I think if we eventually had to move up the ladder and do something dull, if we had to just sit behind a desk and wear a suit, we'd do something else, because it's all about doing computer games."

For a second, Carr's attention wistfully drains away, like he's imagining a world where he's free to sketch out and realise idea after idea, without needing to worry about PR or sales or release dates. Or maybe he's just remembered exactly how in love he is with *Startopia* and Mucky Foot: "Mucky Foot's a great vehicle to carry on doing what you want do without someone telling you what to do. It's the best reason to form a company." Which, surely, makes it all the more depressing when you see your old company consumed by the might of Electronic Arts? "Well, it was inevitable really, probably because there was an offer made for Bullfrog which couldn't be refused. Once it became worth an obscene amount of money, it was gone. It would've been foolish to turn it down. But from that point Bullfrog was no longer this group of people who were doing these great creative games, turning them round relatively quickly, and free to do pretty much what they want under the reputation they had. Once it became EA, they concentrated on franchises that the public knew instead. No one knew it as a badge name company. And that's why I think most of the more creative, more important members of Bullfrog decided to leave."

Going it alone

For Diskett, McGechie, and Simmons, that time came at the start of 1997, when they announced the forming of Mucky Foot Productions. Their first title, the millennial dystopia *Urban Chaos*, was published by Eidos in December 1999, and while it generated excitement in the press, sales figures didn't match what the team feels the game deserved. "I think it was overlooked," says Diskett, "and I think part of that was the subject matter we chose. Playing a black, female, rookie cop at the turn of the millennium just wasn't attractive to enough people. It doesn't have that impact of, say, *Blade*. There wasn't an instant attraction."

Buildings are placed tile-style on the fractionally curved surface using a system that will be familar to all of those who have played a *Sim* or *Theme* title before. Once constructed, the contents of rooms can be altered – for example, the spacestation owner who notices his crew are sleepy might want to add some more berths to a cabin

"It was seen as a console game on the PC, and people had problems with that," adds Carr. "And the characters weren't established, so there was no one saying: 'Oh yeah, I'm going to play as D'Arcy Stern'. Whereas, if you're going to buy an Eidos game, you'll buy *Tomb Raider*, because it's established. I mean, you could sprint around a convincingly large cityscape, there was chasing, fighting, platforming, combat – there were all these elements in the PC game which were pushing things further than one nice-looking computer ass running through a tunnel. But we obviously got it wrong to some extent."

The game still has its dedicated supporters – one magazine recently placed it in its top 50 games of all time – and a Dreamcast version has just been released. For many, though, it left one overriding memory, as Carr recalls: "When the guys first got the engine up and running, like anything else you want to get people in on it. So Mike put together some of the cool little physics things, just little elements. So we had the pigeons and we had the leaves, and if you run round the leaves they vortex into a swirl, and it became like 'Oh, you're the game with the leaves'. Yeah, thanks, that was when there were only leaves in it. But people still talk about them."

This seems symptomatic of an unwritten Mucky Foot rule, coding for coding's sake – cute, pointless, and utterly based in show-off culture. This is a company which still holds demo-coding competitions at lunchtime, a reinstated relic from an age when coders would compete to see who could get the best effects within an hour, or 10K, or other ludicrous limitations. Pointless, but the ethos reverberates around *Startopia*, which features innumerable atmospheric gimmicks within a personality packed game dynamic that's so much more than the *Theme Park In Space* most previews have painted it as.

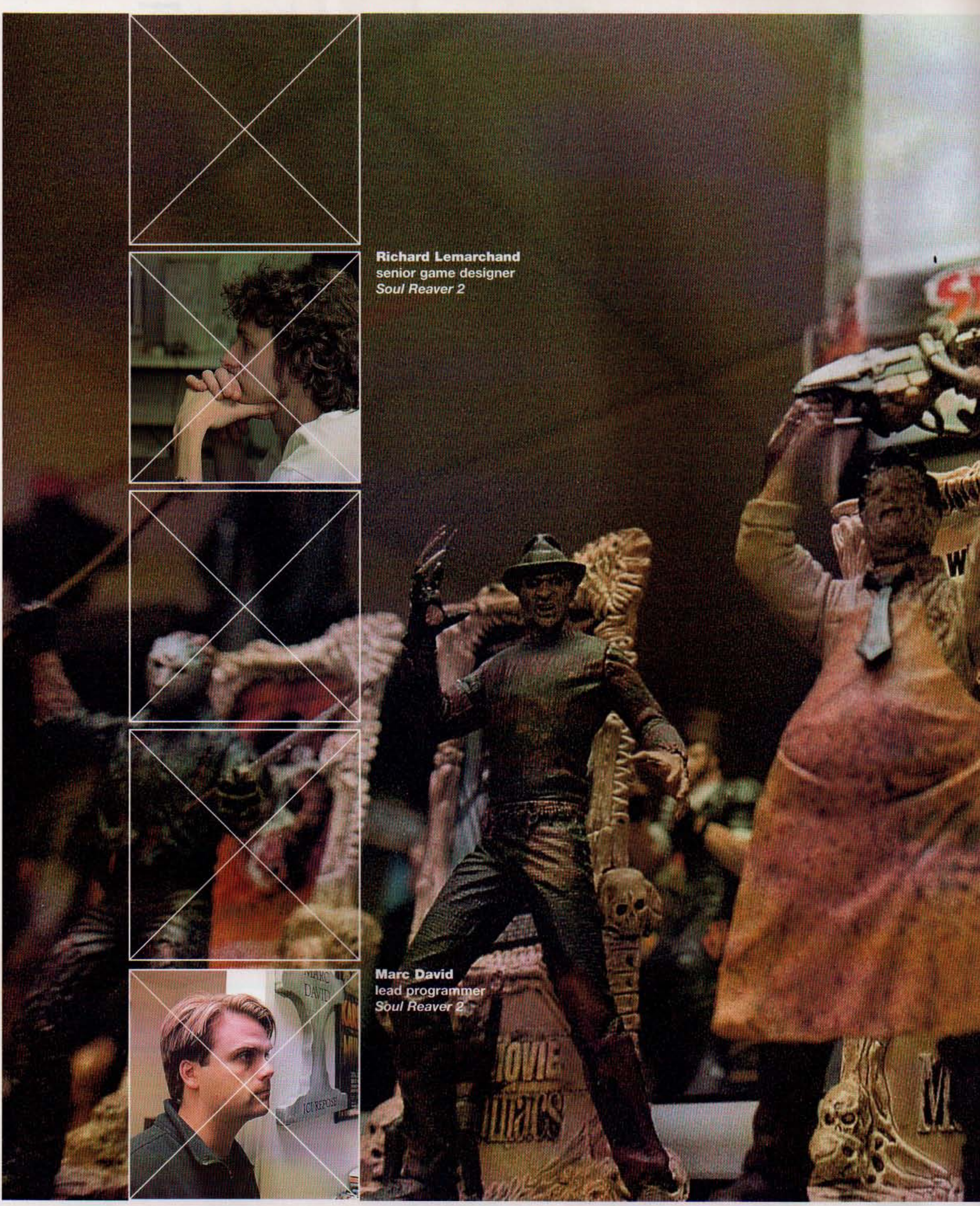
The impression Mucky Foot gives is that a lot of the game's features aren't part of any

Station employees can be hired, promoted, and – if they're too lazy – fired with the click of a button

grand vision, or anything to do with the milestones the team knows it has to hit every month. They're just the coders, the designers, the artists showing off. It's evolutionary, enthusiastic game design. It's less haphazard than it initially seems, but it's still refreshing. When the team goes off to have its photos taken, **Edge** is given a chance to play through the first level of *Startopia*. Theoretically, this is meant to be a solitary experience, but Carr hovers around pointing out features that may go unnoticed, gently berating his co-workers for tiny texture errors. He's anxious that everything goes perfectly, he can't walk more than five yards from the desk without doubling back and reiterating something about the game. He's nervous. *Startopia* impresses enough to render those nerves absolutely redundant. A good start for a franchise?

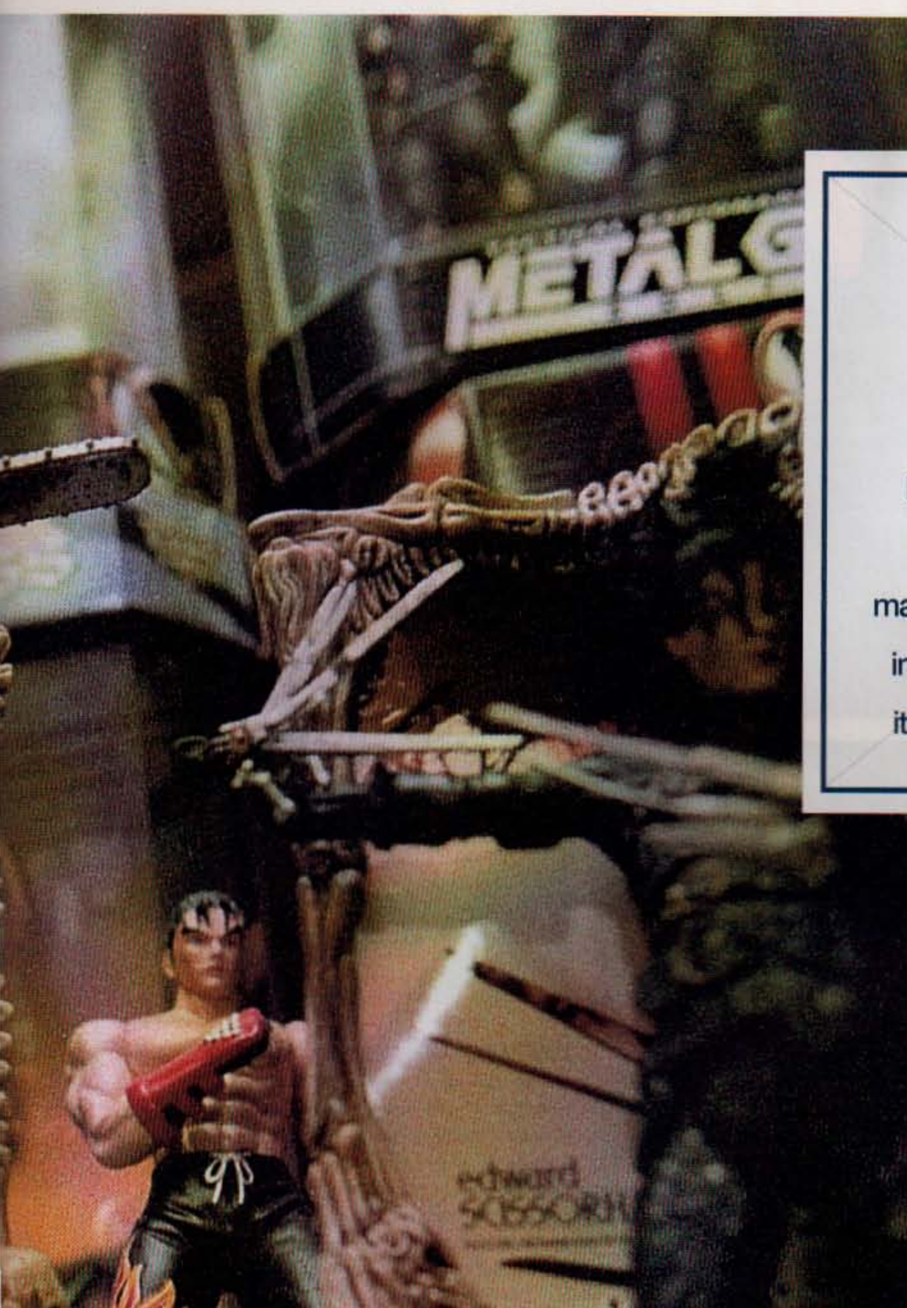
"I don't think any Bullfrog game initially started as a franchise. It started off as an idea – it wasn't like 'How are we going to turn this into *Dungeon Keeper 6, 7, 8, 9?*' The nice thing was those ideas were cultivated as original products. There's a slight problem now; if you're under the umbrella of a publisher, or a big corporate company like EA, then you pretty much know an original idea's got little chance of survival because it's up against these huge franchises – unless, of course, it's got franchise potential itself.

"*Theme* didn't work in America, so they stuck 'Sim' in front of it. It's the same game, but they don't think they can market the game. That's not important to how the franchise is marketed – it's what it's called, which is a bit scary. The nice thing here is that we still want to bring quirky software to the market, and not have to worry about how we franchise it, or whether or not it's got potential in certain market groups. I mean, these people don't play games." Carr's sentence tails off. The punk rock anger bubbles silently beneath the surface: "We don't care about that stuff. We just create software, game ideas."



Richard Lemarchand
senior game designer
Soul Reaver 2

Marc David
lead programmer
Soul Reaver 2



Inside…

Crystal Dynamics

Eidos gobbled up the company that created *Gex* in 1998, but the Silicon Valley outfit has maintained its identity, forging a successful series in *Legacy Of Kain* at the same time. Edge gets its teeth into *Soul Reaver 2* and *Blood Omen II*

Americans are proud of their achievements. The foyer of Eidos' studios in the heart of San Francisco is like a lavish trophy room at a successful football club. The high glass cabinets full of silverware and Lara Croft merchandise are clearly designed to impress clients, but also reflect the confidence which the company is feeling just days after the launch of PlayStation2. But there is little time to inspect the spoils of victory before your correspondent is ferried along the freeway out to Silicon Valley and the home of Crystal Dynamics, the company which Eidos purchased outright in September 1998.

Although it may be stretching the analogy somewhat to say that there is also a valley between Eidos and its subsidiary in terms of approach, there is certainly some disparity. Things are simply done in a slightly more relaxed and – to use a Californianism – organic manner at Crystal Dymnamics. The reception area has its trophies, of course, but they are not so prominent, hiding somewhere between the front desk and a pot plant. A platinum disc for *Gex* sits next to a gold one for *Total Eclipse*. Both titles were released on the now-defunct 3DO, and they even bear Trip Hawkins' autograph.

Crystal Dynamics was founded in 1992 in Palo Alto, California, and burst on to the 32bit scene with titles such as *The Horde* and *Crash 'N Burn* – the latter proving something of a portent for the 3DO with which it was bundled upon release for $699. The games were critically acclaimed, but the system did little to enhance Crystal Dynamics' then growing reputation as a golden developer about to stir things up.

"I started at Crystal in early 1995 helping finish up *Gex* for the 3DO," notes **Richard Lemarchand**, one of Crystal's senior game designers, and one of the few remaining team members from that period. "Describing all the

Raziel still retains his main ability in *Soul Reaver 2*: the power to re-energise after sucking in the souls of his victims. "It's just a bad ass move," says Hennig. "He's embarrassed because he has no lower jaw and there is just this big exposed soft palate. It is terribly humiliating," Losing his energy means a trip back to a waypoint, although Crystal is ensuring this is less taxing than in the first game

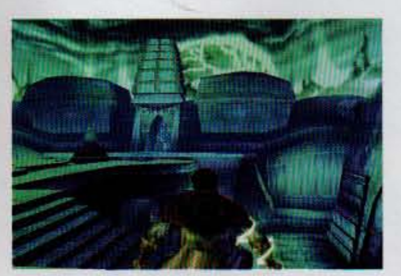
changes I've seen would take a whole book – there were a few bumps along the way, but we've been very lucky in having great people at all levels to steer us first toward becoming a profitable company, and then getting us bought by a publisher."

A shift away from the flagging 3DO was crucial in 1995, but Crystal backed the Saturn only to discover, like so many others, that Sega's console was never going to match the PlayStation in terms of its 3D capability. But, ironically, it was the two-dimensional top-down RPG *Blood Omen: Legacy Of Kain* which again stamped the developer's presence as a developer to be recognised and won the respect of discerning gamers worldwide. The history of Nosgoth has revitalised the company, providing the lifeblood for a lucrative franchise.

Crystal's two-pronged attack

"Crystal now want to continue with two epics side by side," states executive producer **Andrew Bennett**. "Crystal realised that ideally we'd like to have a *Legacy Of Kain* game every year. This was counter to the nature of these heavily story-based games which can take up to two years to make to the quality that we're trying to put into them. It was decided that the best way around this was to have two complete teams working on two games at once, with staggered delivery dates."

The two titles – *Legacy Of Kain: Soul Reaver 2* and *Legacy Of Kain: Blood Omen II* – are separated in terms of stylistics and having independent teams working on the projects, but there are important links between the characters and events in both. A time-travelling element and a mythology which incorporates



Crystal is pushing PS2 to create grandiose environments for Raziel to explore in *Soul Reaver 2*. Enter a new area and the sense of scale is conveyed particularly well. Elemental Reavers will unlock certain areas

The team is keen to make the player think about how to overcome problems rather than just using trial and error to progress. Each environment in *Soul Reaver 2* will contain a central puzzle with surrounding rooms supporting this idea

the stories which ran in both *Blood Omen: Legacy Of Kain* and *Legacy Of Kain: Soul Reaver* meant the teams had to be sat down for eight hours to have the plot outlined.

"We are big 'Twelve Monkeys' fans as far as time travel stories go," relates Lemarchand. It's convoluted, but in essence the two main character's fates are locked together. "The game is themed around the question of destiny versus free will," continues *Soul Reaver 2* director **Amy Hennig**. "It spans time periods well before *Blood Omen*, as well as just before, during, and just after." Fans of the series will be interested to hear the enigmatic ending to *Soul Reaver* being elucidated somewhat. "It's not like Kain ran away at the end of *Soul Reaver* – he lured Raziel into the portal. Kain has a purpose in mind which he needs Raziel to fulfil. Raziel, meanwhile, still believes that he's on this singleminded crusade."

The staking of victims returns, though improved animation makes the manoeuvre even more grisly

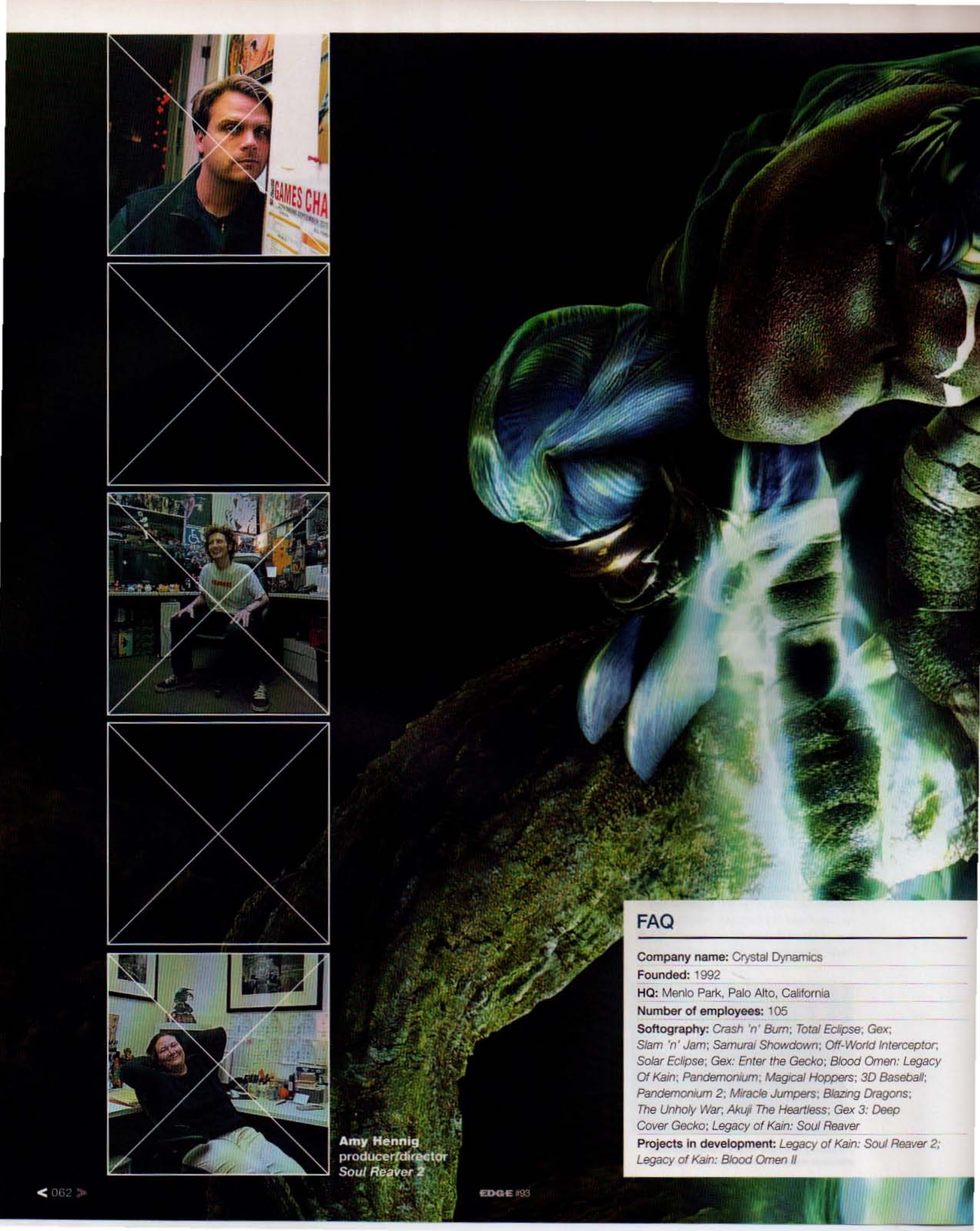
Legacy Of Kain: Soul Reaver 2

Of the two titles, *Soul Reaver 2* is the most complete and is slated for a March 2001 release on both Dreamcast and PlayStation2. It is the game which Crystal is clearly most eager to show off. "In the space between May and October we built the entire PS2 engine," begins Hennig, "including what the hallmarks are of the *Soul Reaver* series for us, which is the data streaming and the spectral morphing [whereby Raziel moves between dimensions]."

But Crystal is being somewhat modest when it mentions *Soul Reaver's* hallmarks as technical ones. There was a tremendously innovative game there which actually gave gamers puzzles to solve rather than simple key/door combinations so common on the PlayStation. "Now we have added a whole layer of logic to the game," continues Hennig. "The point is that none of us want you to go in a room and then there's a goal in that room, and then you open a door and you do the same over again – nothing's interactive. Before we build anything we lay out the entire levels so there is a point for everything that happens. So each level has certain conditions which must be met. There is a central puzzle which must be worked out and the rest of the level has to support that idea."

This approach to level design is curiously

Raziel can still use his damaged wings to glide across small chasms (above) but extra physical characteristics will not be added. Instead, the elemental Reavers will provide many of the puzzle mechanics in the game. An Ice Reaver, for instance, can freeze large bodies of water allowing access to fresh arenas. The fire Reaver can then unfreeze these, generating many more possibilities



Amy Hennig
producer/director
Soul Reaver 2

FAQ

Company name: Crystal Dynamics

Founded: 1992

HQ: Menlo Park, Palo Alto, California

Number of employees: 105

Softography: *Crash 'n' Burn*; *Total Eclipse*; *Gex*; *Slam 'n' Jam*; *Samurai Showdown*; *Off-World Interceptor*; *Solar Eclipse*; *Gex: Enter the Gecko*; *Blood Omen: Legacy Of Kain*; *Pandemonium*; *Magical Hoppers*; *3D Baseball*; *Pandemonium 2*; *Miracle Jumpers*; *Blazing Dragons*; *The Unholy War*; *Akuji The Heartless*; *Gex 3: Deep Cover Gecko*; *Legacy of Kain: Soul Reaver*

Projects in development: *Legacy of Kain: Soul Reaver 2*; *Legacy of Kain: Blood Omen II*

matched by the management philosophy at Crystal, which sees everyone pulling towards a common goal. Lemarchand explains: "I think that came about because the games development veterans instrumental in setting up Crystal were keen to avoid the kind of bureaucracy that can result when a chaotic, organic process like making videogames needs to become more structured and predictable. Conversely, we can't just let our projects run unmanaged. Even when an organisation's distributed and cooperative and networked like ours, with decision-making devolved to those 'artisans' in the best position to make decisions about their own work, it's still good to have someone with whom the buck stops."

There is certainly evidence of the play hard but work harder ethic. Toys serve as wallpaper behind most workstations, while pool tables, bodyboards, and skateboards are also in evidence. But when it comes to level design and problem setting the team is working hard to offer something novel and less frustrating than the previous game. "One of the criticisms of the last game, and justifiably so, was the fact that there were too many permutations for puzzles – it was too much like a Stanford IQ test," remarks Hennig.

The puzzle mechanics have been thought about very hard, not just to avoid giving players a 'try everything' approach, but to give everyone on the team – from artists to programmers – the opportunity to come up with their own ideas. "What we are demonstrating here is that we can use objects and place them contextually to trigger cinematics," says Hennig. "Nothing is hardwired, so programmers have to do something special. Artists can also work together using all the means and the tools that the programmers have provided for them to create these cinematic effects."

"It just blew the game wide open," adds Lemarchand. "And it allowed us to create really elegant innovative set pieces at the core of the puzzles, which is really what we went for." At the heart of *Soul Reaver 2* are the elemental forges which imbue Raziel's weapon with special powers, and also add a new set of mechanics to enable the player to interact with the game environment in intelligent ways. "There are these mysterious ancient structures which are built for, and attuned to, the reaver," says Hennig. "The forges are light, dark, fire, air, water, earth, and spirit. Each one has its own impact on the gameplay. So, the light reaver can illuminate the very dark areas which can be a huge benefit to problem solving.

"Encountering each forge will give a different set of mechanics. The dark reaver can be used in certain places to create a bridge across an otherwise inaccessible chasm. The idea is that rather than layer on more physical mechanics – like saying now you can skip as well as jump – the idea is to come up with constant mechanics. The idea is that every time you get an elemental reaver, it's like a little landfall for a bunch of mechanics, because each one has from anywhere from three to six

"One of the criticisms of the last game was that there were too many permutations for puzzles – it was too much like an IQ test"

These early screenshots still give a good indication of where Crystal wants to go with *Legacy of Kain: Blood Omen II*. Due to Kain's particular predilection for plasma, combat is to play a key role. Anyone in the game can be chosen for a victim, and after a bout of intense swordplay blood can be extracted. Not in traditional Dracula fashion – it is propelled across the screen in a bloody spray

As *Blood Omen II* progresses Kain will gain in strength. Extra powers called 'glyph' skills can be obtained. Some allow him to leap further, and others give him the power to control the minds of weaker victims

Kain can travel into the heart of Meridian committing atrocities in *Blood Omen II*, but the locals will quickly mount a concerted attack. Stealth is required if better progress is to be made – so his ability to hide in the shadows is key. Victims can then be plucked from the streets dragged down dark alley ways and dispatched in a more surreptitious manner

mechanics associated with it which are very unique, and the player has to constantly think how you use them with each other."

The clever use of puzzles linked to the spectral morphing is *Soul Reaver*'s strongest element, promising gamers an accessible game with depth at its heart. In terms of structure the Crystal team is glad to note inspiration from a familiar source. "We are all huge devotes of Miyamoto," admits Hennig. "The whole goal here is to have this epic interconnected world, which is where the whole idea of data streaming comes in. The player experiences most of the world by travelling across the landscape, discovering all these areas which they can't reach or solve yet because they haven't earned the appropriate mechanics. So you will see all these little fonts which haven't been lit yet – a bit like the windows in *Mario 64* – they aren't turned on yet, but you know they will be later."

Legacy Of Kain: Blood Omen II

Downstairs, and, rather fittingly, in a slightly darker part of Crystal's development studios, is the team working on the sequel to the million-selling *Blood Omen: Legacy Of Kain*. There won't be many who will be surprised to hear that the second title in the series will be a huge departure from the original. It is four years old, after all, and the top-down aesthetic couldn't look anything but outdated on PS2. The title is only half way through its development cycle, though Crystal is hoping for a release before Christmas 2001.

"We first of all wanted it to be a lot of fun to play an evil character," begins **Mike Ellis**, lead designer on *Blood Omen II*. Those who played the original title will recall the copious amounts of blood which Kain needed to extract from his victims to survive. "It's not like we're trying to be Beavis and Butthead – look at us, loads of blood, isn't it cool – but a vampire game without blood would be like a race game without fast cars. Seriously, though, the blood is a large part of *Blood Omen*'s heritage, and like the original game we're using it as currency and to display cause and effect feedback to the player. We're not trying to replicate the infamy of some past games in which once the shock value wears off there's nothing else to the game."

Set 200 years after the events of the first title, Kain must search the capital city of Nosgoth, Meridian for his powerful Soul Reaver. The title is already beginning to take advantage of the extra grunt offered by PS2. Gone is the overhead perspective, replaced with a powerful thirdperson engine. The battle system is particularly impressive, with intuitive controls and dynamic blocking manoeuvres. When Kain parries attacks they are not just made at one point along the blade, but a sophisticated animation engine ensures that the blades meet in different places. This a cosmetic touch, but one that adds fluency and drama to battles. Ellis promises that the combat will be a main focus: "enabling the player to take the weapons of his victims – each with their own combo, grab attacks and finishing moves."

Graphically, Meridian is a dark, brooding city replete with an entire community of people. Ellis showed **Edge** Kain's darker side by having him knocking a peasant to the floor and kicking her in the ribs. "Every character in the game can be ignored or attacked," he points out. "The human characters will generally be wary of Kain, but can be interacted with. Should Kain become more aggressive or display powers beyond those of a human then peasants will become frightened, and the Sarafan [Kain's main nemesis] will attack."

Townsfolk and the night watch are easily defeated, but there will be plenty of more devastating enemies who will challenge the player in *Blood Omen II*. Each of these will have different weapons, and different fighting styles and attack combinations

RPG elements will play a role. Clues and plot details will be revealed in a traditional manner

Kain will begin the game with basic abilities such as becoming invisible in shadows, but throughout the game he learns 'dark glyph' skills such as super leaps and charm spells. Already the ability to command people with his mind has been coded. "It will be just one of the ways which Kain can overcome problems," explains Ellis. "A sentry behind a locked gate, for instance, can be manipulated to open the gate for Kain.

"Progression is driven by the storyline with the player learning of the tasks Kain must perform via other characters. There will be an overall goal for each area, but also several smaller tasks that must be solved to move within reach of the overall objective. We also expect to bolster this with some small side quests that need not be completed in order to finish the game."

It is still very early to be sure if *Legacy Of Kain: Blood Omen II* is going to distinguish itself from the other RPG titles set to arrive on PlayStation2 next year, but in typical Crystal fashion the team is not going to rush things to please its publisher or make an early killing.

Will the two legends ever converge? Bennett believes that this might prove detrimental: "Of course, Raziel and Kain do meet in *Soul Reaver* and *Soul Reaver 2*," he points out. "And in both games meeting Kain is one of the driving forces for the player. Will both games merge into one? Not in the foreseeable future. We believe that both games have a lot to offer separately, and we'll be adding one *Legacy Of Kain* game to the franchise every 12-18 months."

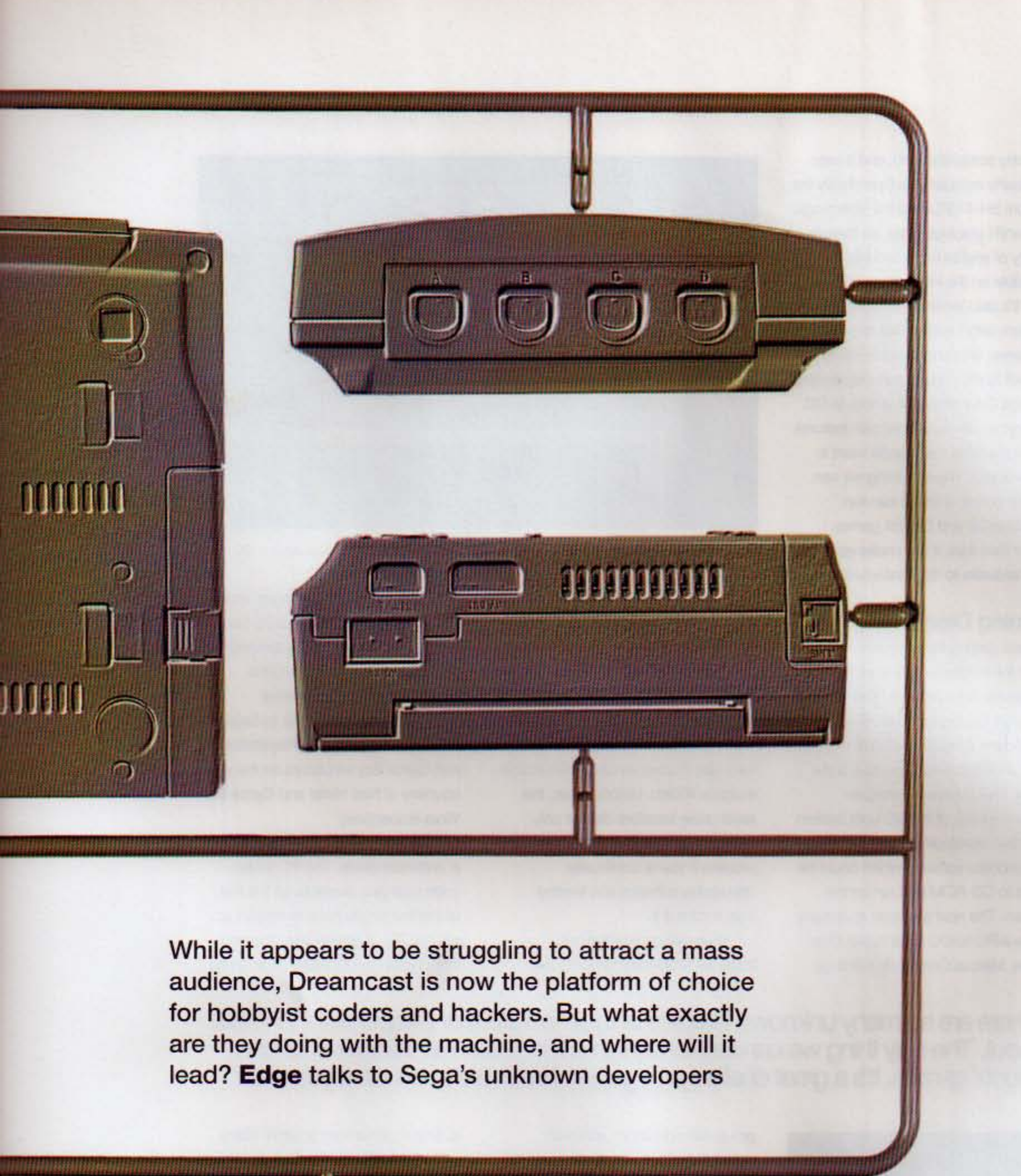
Gex may still adorn the business cards of the Crystal Dynamics workforce, but Kain and Raziel are quickly acquiring their own celebrity, especially in the States, where gamers are already being treated to novella-style previews of the mythology surrounding the titles. As it stands, the prospect of models of both Raziel and Kain appearing in the Eidos trophy cabinets by next year looks a sure thing.

Andrew Bennett
executive producer
Soul Reaver 2/Blood Omen II

Mike Ellis
lead designer
Blood Omen II

Cory Stockton
lead layout artist
Soul Reaver 2

Remodelling
the Dreamcast
POWER
OPEN
Dreamcast



While it appears to be struggling to attract a mass audience, Dreamcast is now the platform of choice for hobbyist coders and hackers. But what exactly are they doing with the machine, and where will it lead? Edge talks to Sega's unknown developers

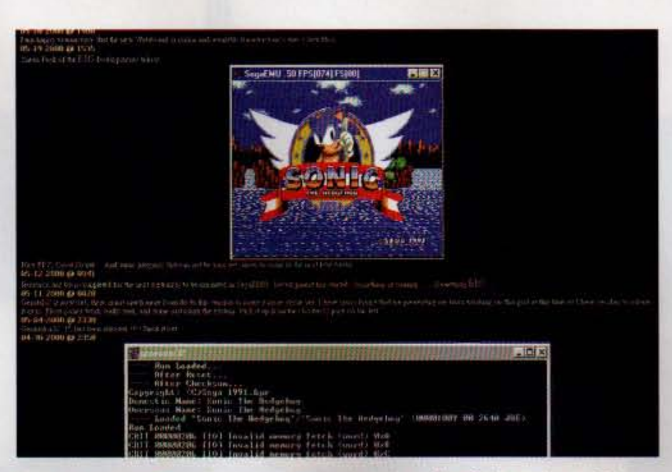
In one sense at least, developing a piece of computer hardware is like having a child – it only really belongs to the parent when it's in the womb. Beyond that, however much protection it is afforded, it becomes public domain, open and susceptible to outside influences. And those influences don't always have the same plans for the progeny as its parents.

Which is why referring to a console as a closed system (as opposed to the open, free-for-all architecture of the PC) is nonsense. There is no such thing as a closed system, as home coders have proved since the dawn of videogaming. The SNES was a popular homebrew system, as was PlayStation (helped no end by Sony's groundbreaking Yaroze project), and in Japan there is even a cult mag dedicated to console modification. This is nothing new. Dreamcast, though, is proving especially popular.

There are already dozens of sites dedicated to DC development, the dev channels on efnet are frequented by hundreds of people, and one of the key players in the scene – www.boob.co.uk – attracts more than 10,000 hits a day. It's not hard to see why Sega's machine has attracted special attention: it's powerful, the architecture

is pretty straightforward, and it uses thirdparty components (specifically the Hitachi SH-4 CPU and the VideoLogic PowerVR graphics chip), so there is plenty of source code and info available on the Internet.

"It's also an entirely new area to work with," adds **Mike** at Atani Software, who chose not to identify himself further, and is currently porting a Mega Drive emulator across to DC. "There are so many unknown features of the machine that people want to know about. The only thing we can say for certain is that it can run WindowsCE and DirectX games. Other than that, it is a challenge to get the hardware to do what you want."



Mike, who runs the Atani software site, is currently porting a Mega Drive emulator to DC

Taming Dreamcast

Indeed, getting the hardware to do what the homebrewers want has been a relatively slow process. The very first DC work concentrated on simply getting the console to accept code from an external source, via a serial cable. This involved gaining an understanding of the DC boot system and then developing a piece of serial port monitor software which could be burnt to CD-ROM and run on the system. The next step was to actually make a PC-to-DC serial cable. One coder, Marcus Comstedt, came up with an interesting solution: modifying a standard Dreamcast-to-Neo-Geo Pocket cable to work as a PC-to-DC connection. The only problem with this is that data transfer is incredibly slow. Brian Peek, for example, is currently working on a conversion of the PC Neo-Geo Pocket emulator NeoPocott, which is 400Kb. Unfortunately, the serial cable transfers data at only 5Kbs – a tedious and time-consuming process if you're continually debugging software and loading it up to check it.

There are other solutions, however. A veteran demo-coding group named Hitmen achieved notoriety by being the first amateurs to get a DC demo up and running, which it demonstrated at the Mekka Symposium Scene party last Easter. Hitmen used a proprietary Dreamcast debug handler to load data from a PC. Since then, a company named Double Dutch designs has developed a high-speed transfer card that can shift data at 100-150Kbs – a much more desirable work rate. So now the floodgates are open, and dozens of interesting projects are underway in the homebrew sector. Admittedly, many of them are conversions of emulators already available on the PC. **Emanuel Schleussinger**, aka Tubooboo, is working on a DC port of the excellent PC SNES emulator SNES 9X; US outfit Ganksoft is bringing the Neo-Geo Pocket emulator, NeoPocott, over to Sega's machine; there are also PlayStation and Game Boy emulators on the way courtesy of Ned Heller and **Cyrus the Virus** respectively.

This influx of emulator ports is understandable. The PC source code is already available on the Net, so coders simply have to adapt it to run on DC – a slightly less daunting introduction to DC coding than trying to start a game from scratch. There are some new apps appearing, though; a simple conversion of *Pong* can be found, and there are MP3 and MPEG movie players, although both of these have been developed with pirated Dreamcast software development kits.

Copyright issues

It is in this area that questions of legality may arise. On the face of it, homebrew DC development occupies something of a grey area. Most of the pioneering work has been achieved through reverse engineering the technology (in other words taking a

"There are so many unknown features of the machine that people want to know about. The only thing we can say for certain is that it can run WindowsCE and DirectX games. It's a great challenge to get the hardware to do what you want"

Boob.com is one of dozens of sites dedicated to DC development, and gets over 10,000 hits a day

NeoPocott *Match Of The Millennium*

NeoPocott *Metal Slug 2nd Mission*

NeoPocott *Cotton*

Work in progress

1. Ngine – Schleussinger describes this project as: "A more or less stable kernel for porting emulators to the Dreamcast. You can think of ngine as an abstraction layer like a very, very early version of DirectX. This will allow any program written using ngine for input/output to instantly run on a multitude of platforms, as long as a driver has once been developed for it. Ngine is nice because it is so simple. It cannot do much, but what it does, it does very fast."

2. NeoPocott – NeoPocott is Brian Peek's conversion of the PC Neo-Geo Pocket emulator designed by Julien Frelat. Still in the very early stages of development, the project was inspired by SNK's decision to pull NGP out of western markets. "I don't want to see the machine or its games forgotten," says Peek.

3. DC Jackal – Ned Heller's DC port of the PC PlayStation emulator has, again, got a long way to go before a public beta. "Some major problems I've run into are getting the DC hardware to read the certain sectors of the PSX game CD," explains Heller. "Also, porting from an OpenGL app to a Glide app has been a little confusing. Overall the most disappointing thing is its compatibility, but I hope to have something running soon."

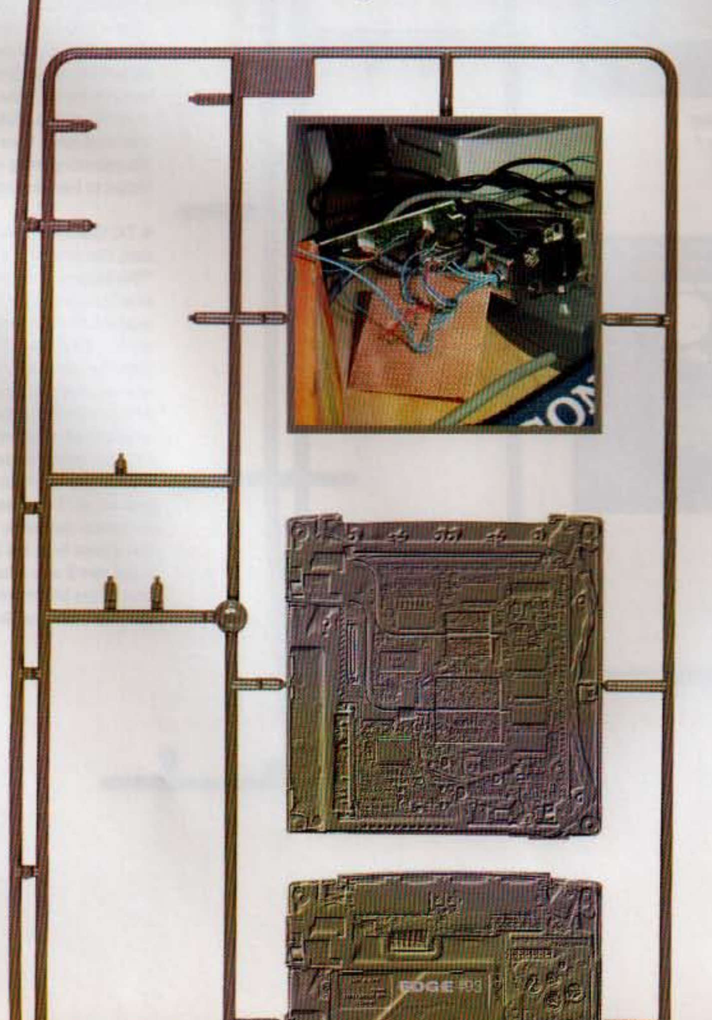
4. DC Generator – Another early emu port, this time of the Sega Mega Drive. "The biggest problem to date is the lack of a GUI (Graphical User Interface)" explains Mike, of Atani software. "With my *Windows* port of *Generator* (http://www.squish.net/generator) I had a nice and simple console-based GUI which did most of the functions you would need. Well, with moving to the DC I am being forced into writing a completely new GUI system from the ground up. This means lots of new problems can come up with reading the games from the CD. But for the most part it was a fairly straightforward port to the DC, thanks to James Ponder [original author of *Generator*]."

Dreamcast to pieces and figuring out through experimentation how it works). This procedure is technically legal, as Codemasters proved in the late '80s, when it was taken to court by both Sega and Nintendo for developing its own carts for the Mega Drive and SNES systems, having reverse engineered the technology in-house. Codemasters won. Furthermore, a lot of the emulators currently in development are using free development tools, coded by amateurs and freely available to all – there is no copyright, patent, or trademark infringement here.

However, where things get a little murkier is in the use of pirated software development kits. There are essentially two official SDKs for Dreamcast – the WinCE kit, which most developers use to port their PC games over to Dreamcast ("The quickest and easiest method of programming for DC, since the graphics API is DirectX, as used in Win32 games," according to Cyrus), and the Katana kit – the main set of software tools used to create original DC games. These have both been leaked on to the Net. Not only are these copyrighted by Microsoft and Sega (and therefore illegal to use without a licence), but any app written with them requires the Utopia boot disc to run on DC, and this itself is a hacked product, widely used to boot pirated games. Even here, though, the law doesn't really apply. Very few of the people **Edge** spoke to are making any money out of DC development – they're doing it for fun, as Schleussinger states: "We're not trying to steal anything from Sega. We are also not here to compete with the brilliant professional development teams out there. All we want to do is play with Dreamcast, and to make it do things it was not intended for, for our own amusement." And if no one is making any money, or potentially stealing profits form Sega, why should the company go to the expense and inconvenience of a legal battle?

Dreamcast is proving very attractive to homebrewers, and a large online community exists

Reverse engineering is technically legal, as Codemasters proved in the late '80s, when it was taken to court by both Sega and Nintendo for developing its own carts for the Mega Drive and SNES systems... Codemasters won



Sega's stance

Sega's own position on this is ambiguous. **Serge Plagnol**, who heads up Sega's Dreamarena initiative, says: "The problem is some IP technologies used in Dreamcast are not owned by Sega but only licensed, and not all of these technologies are announced to the public. Those who are using the IPs incorrectly could be

Essential kit

Apart from a PC and a DC, what do you need to start a homebrew project?

1. Serial cable – Marcus Comstedt's rough and ready Neo-Geo Pocket-based cable can be easily put together if you have a semblance of electronics knowledge (go to http://mc.pp.se/dc/serifc.html for info). Keep an eye on the main scene sites for news on faster solutions as they arrive.

2. Programming knowledge – "I would say either C or SH4-Assembly skills are essential," suggests Schleussinger. "A good grasp of GCC, Unix directory trees, Make, and so on are also needed. There are a few people who want to write drivers for chips inside the DC, such as the AICA soundchip, and that will require skills on a hardware level as well. Also important is a general grasp of address space inside a machine, and a bit of math (like matrix calculation) wouldn't hurt either for simple 3D apps."

3. Software tools – there are now plenty of free tools and source code examples on the Net. Again, the best thing to do is check out the key homebrew sites for what's available and leave messages on the forums if you need more info. If you want to go the illegal route and try and blag a WinCE SDK – allegedly the easiest way into DC development (especially for *Windows* programmers) – you're heading into warez territory, and the homebrew sites are unlikely to be able to help you out.

liable to Sega – I think that is potentially this issue.

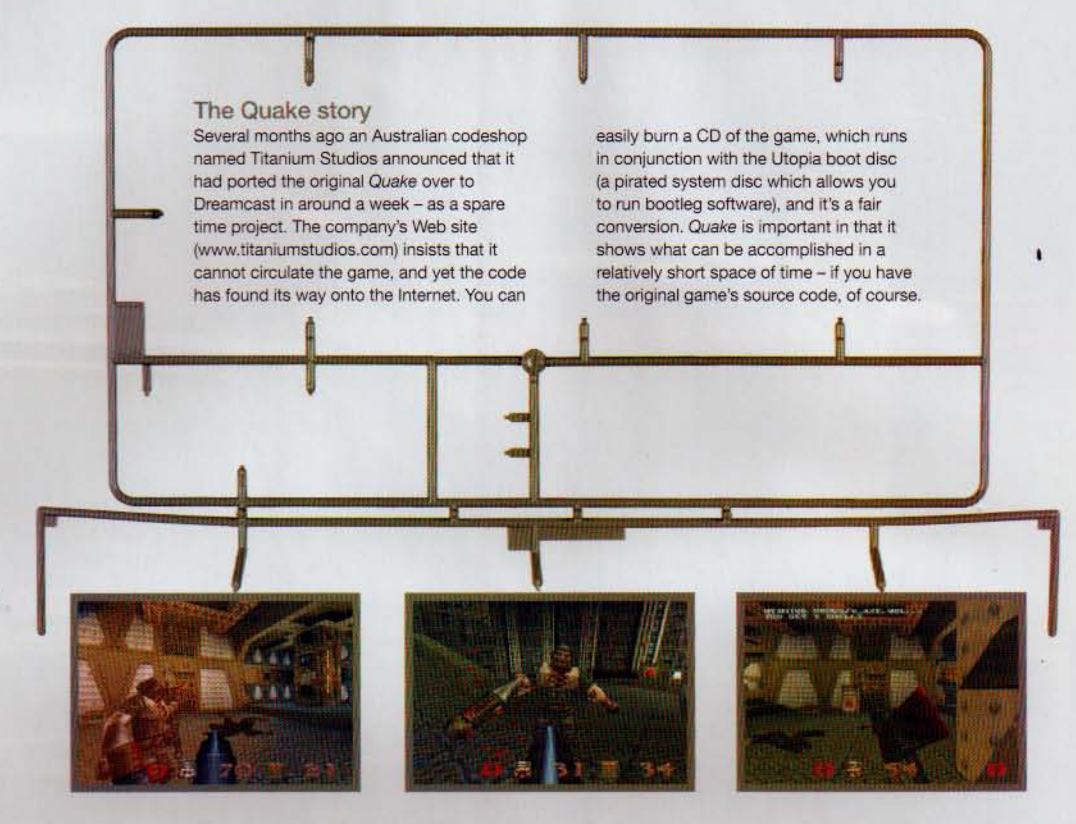
"However, I've been closely following the work of a group porting FreeBSD [a flavour of UNIX, similar to Linux] to Dreamcast. These guys seem very cool and are only doing it because it is interesting. They'd like to use Dreamcast to control Webcams, use it as an MP3 player, or as a cheap home computer. I think this is great."

Despite reservations of the crossover between homebrew development and pirating, Plagnol even states that he'd like to release some kind of DC programming language to the public utilising the mouse and keyboard, which is certainly an open-minded and interesting stance.

Many of the programmers involved in the homebrew scene go on to join legitimate development teams, where their experience of innovative coding and really hacking at the technology comes in incredibly useful (there are very few university courses that will teach you how to communicate with the SH-4 chip effectively). Shiny Entertainment, Bizarre Creations, and Lionhead routinely recruit from the demo and emulation scenes, and if these coders are so immersed in the DC community that they go into DC development, so much the better for Sega. At the very least, a thriving homebrew scene – and the legally produced software thereof – can only boost publicity, as Cyrus maintains:

The Quake story

Several months ago an Australian codeshop named Titanium Studios announced that it had ported the original *Quake* over to Dreamcast in around a week – as a spare time project. The company's Web site (www.titaniumstudios.com) insists that it cannot circulate the game, and yet the code has found its way onto the Internet. You can easily burn a CD of the game, which runs in conjunction with the Utopia boot disc (a pirated system disc which allows you to run bootleg software), and it's a fair conversion. *Quake* is important in that it shows what can be accomplished in a relatively short space of time – if you have the original game's source code, of course.



"I have been in off-the-record communication with Sega, and obviously they would object to anything being commercially released. But as for home-developed, publicly available software, it can only help to boost the popularity of Dreamcast."

What happens next?

As for further projects, no one is really talking about the future. Most of the emulations mentioned here are still works in progress, and until these have been finished most members of the community are unwilling to speculate about what they'll be capable of next. Cyrus mentions working on a word processor or picture editor, and, as many of the homebrew community are in regular contact with the 'real' development community, it may be that more videogame source code will slip out on to the Internet and land in the hands of eager bedroom coders. The availability of the original *Quake* source has led to a DC conversion, and who's to say more games won't follow?

The only certainty is that this infatuation with Sega's machine won't last forever. By the very nature of the homebrew scene, where the challenge of hacking the hardware is the main motivation, it won't be long before they move on. Schleussinger says: "Without using SDKs it will get harder to reverse engineer a console, although it will always happen in the future. I know two or three people who have already managed to get 'Hello World' to appear onscreen from PS2. I will try once I have saved up enough to get one."

"I've been following their work. These guys seem very cool, and are only doing it because it is interesting. They'd like to use Dreamcast to control Web cams, use it as an MP3 player, as a cheap home computer etc. I think this is great"

Development hell (pt 2)

Following last year's exposé of what happens when videogame development goes wrong comes a second look into this most unfortunate area. This time around, most testimonies come from individuals who wish to remain nameless, for some reason…

°Roughing it in Kensington

'I have to say that probably my favourite memory is from my time at VIE, although you could say it ends up with quite the opposite of development hell. I was working on a football game (whose name must be withheld to protect those that worked on it) with a company called ARC Developments. The title had slipped, and VIE had put quite a lot of money into the product. Just a month before beta it was discovered that ARC were in trouble, so much so that it is alleged that they were not paying tax for their employees even though they were deducting it. Very quickly after this they were declared bankrupt and shut down.

VIE had to work fast, and we managed to get all necessary source code to complete the game (don't ask me how, you wouldn't believe me even if I told you – let's just say it involved wads of cash, brown paper bags and a Mongolian barbecue). Luckily we didn't need all the team to complete the game, and we got in touch with the six people we needed to finish all versions.

Our one remaining problem was relocating them to London for the ten or so weeks needed to get everything finished. The decision was made to get them a large flat, not too far away from the VIE offices, for all to share. Simple, you might say, but with VIE being in Kensington the flat that was found was a six-bedroom, five-bathroom mansion flat overlooking Harrods. So, from almost being chased by the tax man for non payment, six lads from Walsall ended up living the life of luxury in Knightsbridge. Unbelievable.'

Anonymous

A faceful of gravel

'Codemasters producer Guy Wilday and his team were out with Colin McRae, recording gravel crunching noises for the second game in the series. Guy asked him to do one last really major swerve across the gravel, then sat down at the side of the road with all the recording equipment, getting it tuned up. Anyway, Colin comes down at something like one hundred miles an hour, and showers him in gravel, cutting him on his chin and all over his face. Cue one trip to hospital...'

Anonymous

Who are you, again?

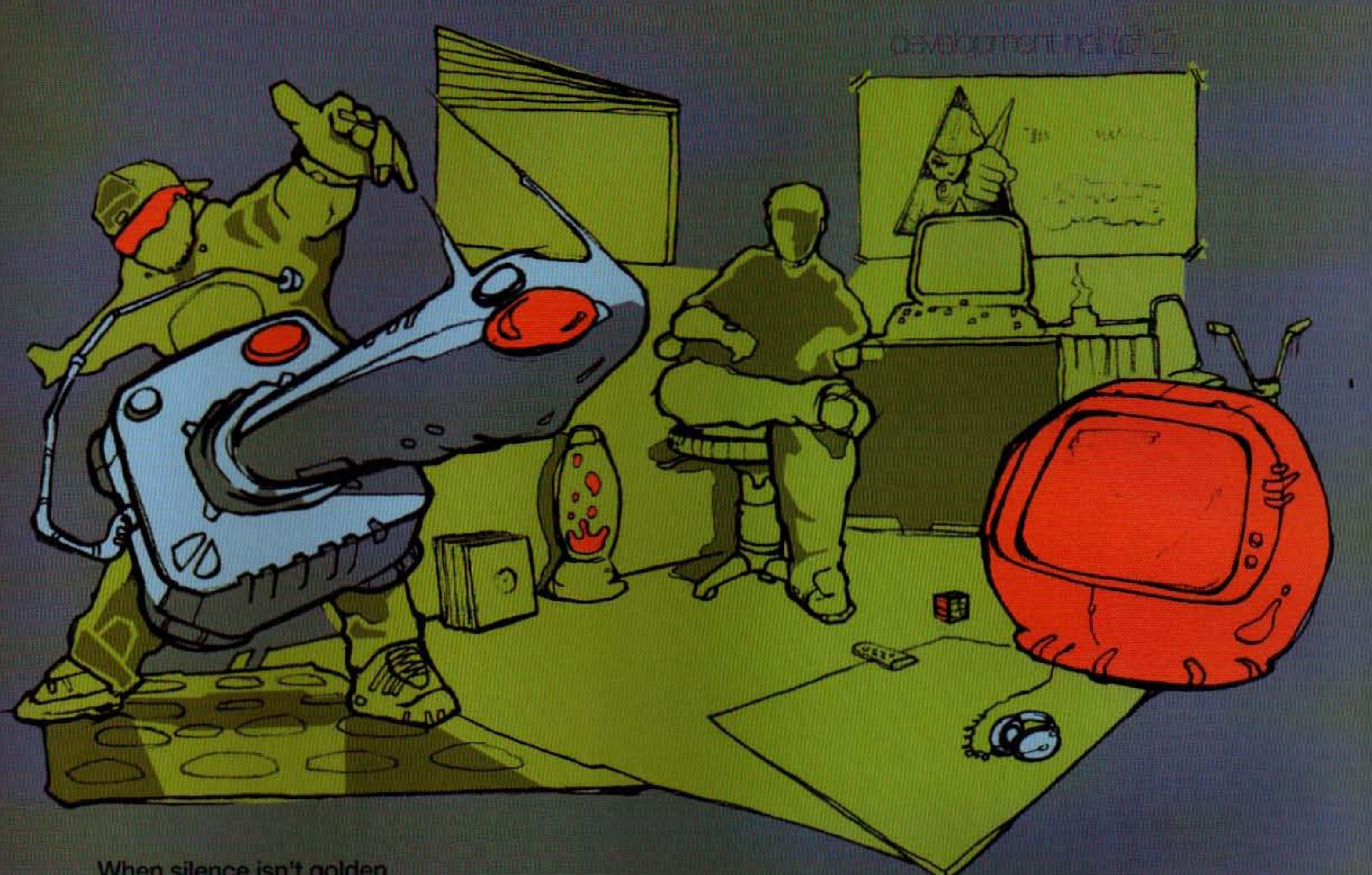
'When we were doing Saturn games, there was a feature that we really wanted to add to a game. Trouble was, as this was years ago, we didn't have a clue as to how to go about implementing it. Anyway, we were going to the Sega dev con at San Jose, and the team asked if we could get any help from Sega people. So we spoke to people there, and asked questions during the conference, but no one could assist us. Eventually, we were pointed in the direction of this top development boss at Sega. We managed to get in touch with this bloke, and actually went to a lunch with him. We explained our problem, and he said he could help. His advice was: "Well, I can't really tell you how to do it, but there's one company I know who can. It's a development team actually based in the UK. They're doing some amazing stuff – really pushing the machine. Do you know them? They're called Rebellion."

Chris Kingsley, Rebellion

I won't get out of bed for less than 1.5m sales

'It was 1985 and I kept getting phone calls from a guy called Dominic Wheatley at a company called Domark. He would say: "David, I have a product just for you. Come and visit me and Mark (Strachan) in Wimbledon." I would always invent some excuse for not going, because we were doing a very hectic project for Rainbird at the time. Anyway, after about eight weeks my resistance had worn down so much that I agreed to make a meeting one afternoon in London. That morning involved a long, hard meet with Tony Rainbird, and I decided that I really couldn't be hacked to go all the way to Wimbledon. So I phoned up Dominic and told him that my car had broken down and that I wouldn't be able to make the meeting after all. I left the British Telecom building, and a car drove straight into the side of mine. After my car had been towed away, I now had to get home by other means, so I decided I might as well go to Wimbledon anyway. I turned up, and Dominic and Mark asked me if Oxford Digital wanted to do the home computer versions of Trivial Pursuit. I said yes. And, er, it went on to sell one-and-a-half million copies.

David Pringle, Empire Interactive



When silence isn't golden

'How about a PR nightmare? This was back in the days of *Flood*, at Bullfrog, between *Populous* and *Powermonger* back in the early '90s. Anyway, X was an incredibly talented 19-year-old who had come into the office and taught himself to program. He'd done a whole game, and he was a very, very impressive individual. Anyway, he said to me: "Peter, I'd really like to get the credit for this, and I'd really like to do the PR. But I'm a bit scared about doing that – do you mind coming along with me to give me a hand?" And I said: "Sure, of course – providing that you demonstrate the game, because the guy demonstrating the game usually gets the credit." So we went along to see [now-defunct multiformat games magazine] *Zero*. David Wilson was the editor there. Now, David was never the most enthusiastic of people. You'd demo to him, and he'd sit there, and you'd think: Is he awake? He'd just stare at the screen. So there's X, demoing *Flood*, showing all the bits that he was proud of, and there's David, hardly reacting at all. I could see that X was getting more and more wound up by the intimidation of silence emanating from David Wilson. Anyway, X had been doing the demo for 15 minutes, and was almost at bursting point. Suddenly, he picked up the joystick, turned around to David Wilson and said: "Yes, I think this game is fucking crap as well, and I hate it!" He threw the joystick across the room, and walked out. There was me, left with Dave Wilson, and what do you say? The programmer has just said: "I think this is fucking crap!"'

Peter Molyneux, Lionhead Studios

'You'd demo to him and he'd sit there, and you'd think: Is he awake? He'd just stare at the screen. This drove programmer X to bursting point'

Good versus evil

'For me, there's always a mixture of thinking: "I hope people are going to work hard. I really hope people are going to work hard. How can I get people to work hard?" And then, when I do get people to work hard, I feel insanely guilty. There has been a real nightmare for me on *Black & White*. One of the chief programmers is Richard Evans – he's doing the AI for the creatures, which is incredibly important. He's a wonderful person to work with, and really believes in the project, and wouldn't do anything but work incredibly hard. Anyway, this happened back in March. He comes over to me and says: "Peter, I'm a bit worried about something. I've just got my wife pregnant. I hope that's okay?" And I say: "Richard, of course that's okay, don't be ridiculous." And he says: "Well, I'm a bit worried that the game might not be finished before the baby is born." I said: "Look, Richard – that's November. We're going to be finished, and we're going to be on some South Sea island somewhere. The last thing you'll be thinking about is *Black & White*."

Anyway, his baby was due to be born on November 6, and the date just got closer and closer. Richard was actually coming in every day until then. I kept on going round to Richard, and this is where the guilt comes in, of course. You can imagine me with a conflicting conscience sitting on either shoulder. One was saying: "You need this person to work hard. It doesn't matter about the baby." The other one was saying: "Look, his wife is home – alone. She's about one week late already, and the guy's still here." I mean, what do you do? Which voice do you listen to? In the end, I had to say: "Richard, you cannot work here any more – it's out of the question!" His wife was incredibly understanding, anyway. He's not been in for the last three weeks, now.

But sometimes you do think bad thoughts – but you have to keep yourself in check. I mean, you can't screw about with people's lives like that. But I do know people in the industry that would have said: "I'm sorry, Richard, but you knew we were making the game. You shouldn't have got her pregnant in the first place. You can't see your wife." And there's this little part of me that understands that. Part of me wanted to turn around to Richard and say: "Yes, Richard, of course you can go to the birth, as long as you take this portable so you can work in the operating theatre.'

Peter Molyneux

Ship Of Doom sails into Parliament

'It was one of my first games, called *Ship Of Doom*. It was a text adventure, and, like all text adventures, it had a parser. The thing about the parsers in those days, and to this day, the incredibly frustrating thing is that you know what you want to say, but you've got to work out how to communicate that via the interface. That's one of the golden rules of game design – that the interface must be intuitive and not stop the player doing what they want to do.

Of course, people would use expletives with adventure games. I believe *Ship Of Doom* was the first game that when you typed in an expletive it would understand you. That in itself was quite fun, if a little bit puerile. But there needs to be a justification for it. So about halfway through *Ship Of Doom*, you came across a pleasure room, in which there was a female android. The puzzle was something silly – you had to steal her comb, and use the mirror to reflect her – you know the kind of stuff. But if you actually typed in the expletive with this android, the game would understand and respond. But it would respond in an entirely inoffensive way. So if you typed in 'Fuck android', then it would give you a reply like 'She suggests you use a screwdriver', or, 'In the heat generated, her leg flies off'. Just silly, inoffensive stuff. Anyway, that was all fine, and people thought it was great. But then a Scottish mother discovered Little Johnny typing in 'fuck android', and got really, really offended that it actually understood it. She complained to Aberdeen Rape Crisis, who then in turn complained to their local MP. And their local MP decided to take it further.

Now, this was back in 1984, and the Obscene Video Bill was being discussed at that time. If you remember, the Obscene Video Bill was brought in response to a lot of very violent videos, like 'The Texas Chainsaw Massacre', sweeping through the whole video industry. During a debate, this MP stood up and said: "I don't think that the bill should be limited to videos – I think it should include videogames as well. I've had a complaint from somebody who talked about this really horrible game, where you can type 'expletive android', and it will understand it." He got whipped up into quite a frenzy.

The whole thing was full of hypocrisy. The wonderful, pinnacle of hypocrisy was *The Sun*, which had on page three a topless woman on the top half, but on the bottom half had 'Computer Nasty Zapped By The Sun'. You just had to look and laugh. Somehow, people's values were so screwed up that there's a semi-naked woman on the top half of the page, and what was really a very inoffensive videogame at the bottom, and *The Sun* screams out: 'This is filth! This is horrible!' Thankfully – for my wellbeing, because I think I would have been lynched if it had gone through – Parliament in its wisdom decided not to include videogames in the Act.

Charles Cecil, Revolution Software

Cheating codeshops

'There's always a risk the project will be cancelled halfway through. But if you have your milestone payments, you're guaranteed some income. The problem comes when you're a smaller developer, when you might be tempted to 'hack in', or fake, features to meet a milestone. But after you've done that, you have to do it again, and do it properly so it works. That's not an uncommon thing. You know how certain publishers seem to get unduly agitated when a game is really late? Well, this can often have something to do with it...'

'The pinnacle of hypocrisy was *The Sun*, which had on page three a topless woman on the top half, but on the bottom half had 'Computer Nasty Zapped By The Sun'. You have to laugh'

When communication breaks down

'I heard this tale about Codemasters. Apparently, they have this really heavy-duty interview system, where they really grill prospective employees. Anyway, there's an artist who goes along, and he hits it off with the people interviewing him straight away. His art's really good, and he seems a really good bloke. Now, the job he was going for involved using *3D Studio Max*. Almost as an afterthought – taking it almost as read that the guy would know it – the interviewer said: "Can you use *Max*?" And the guy replies: "Yes." He got the job.

Fast forward to this guy's first day at Codemasters. He's eventually sat down at his desk, and obviously having a problem. Anyway, to cut to the chase, it transpires that he's never used *3D Studio Max*. "But you said you had experience of Max in the interview," said his senior. "Oh no," responds the newbie, "I thought you meant Macs – Apple Macs."

I think they sorted it out in the end – the guy got training, or something. But what a nightmare.'

Anonymous

The kidnapping

'This integral member of a development team was asked to work completely mad hours – he just had to keep staying, and staying. Eventually, he just got so fed up he walked out. But the development house sent the producer and a couple of guys over in a car to get him back. They actually bundled him into a car, crushing his leg in the door as they did so. Basically, they kidnapped him. Yes, he did end up calling the police. All totally outrageous, really.'

Anonymous

The ugly face of videogame racism

'You remember *Soldier Of Fortune*? And how it was publicised almost entirely on the dubious 'merit' of its authentic violence? Well, in missions in America, if you shot innocent bystanders, there were gameplay-oriented repercussions. It was pretty implicit that shooting civilians was a bad thing. Well, a later level was based in Iraq. There was this entire section that contained Saddam Hussein – I think they thought it was humorous, or topical, or something. Well, it was after the game's release, and a few people noticed that you could shoot innocent Arabs in the Iraqi levels, and there were no penalties whatsoever. And people started saying: "This is really racist." I think one UK PC magazine actually ran an article about the subject. I doubt that it was intentional – although it's a pretty terrible oversight, if you think about it. Apparently, the latest patch 'fixes' it but, as it's a 26Mb download and I've no desire to play the game again, I don't know if that's actually true. Mind you, it might be worth downloading it just to see the bug fix doc attached. 'Fixed glitch with Matrox cards; added further EAX functionality; fixed racism in Iraq levels...'

Anonymous

Escape to disaster

'I heard about this development company boss who figured out a great way to make his staff work late on a project. Instead of asking them to work late that evening he thought his best bet was to quietly slip out the front door and lock up for the night – leaving the poor developers trapped in the building, forced to work through the night. Of course, no one considered what would have happened had there been a fire at the time. After all, programmers are easily replaced, aren't they? Anyway, the boss crept off down the pub for a good time out while the developers worked on, unaware of their predicament. Later on in the evening, one of them told the others he was off to McDonalds to get some food and asked everyone else what they wanted. When he got to the bottom of the stairs he found out that all the doors were locked and that there was no way out. He ran back up to the second floor and told the others that they were trapped – locked up for the evening. Their first and foremost thought was how they were going to get food – and how they were going to get it back into the building. Then one of them had a brainwave. Lying next to them was a huge bunch of bubble wrap – they could lower one of the programmers down using the bubble wrap out of the second-floor window and on to the pavement below. Then he could nip off, get some food, and bring it back. They started lowering him, but the task was tricky. To help, the programmer started trying to climb down the bubble wrap, but just as he was going past the first floor he lost his grip and fell onto the concrete below. Needless to say he broke his leg in such a heavy fall. Still, after a night in hospital the company very kindly offered to pick him up and had him back working at his desk the following morning.'

Anonymous

'No one considered what would have happened had there been a fire at the time. After all, programmers are easily replaced'

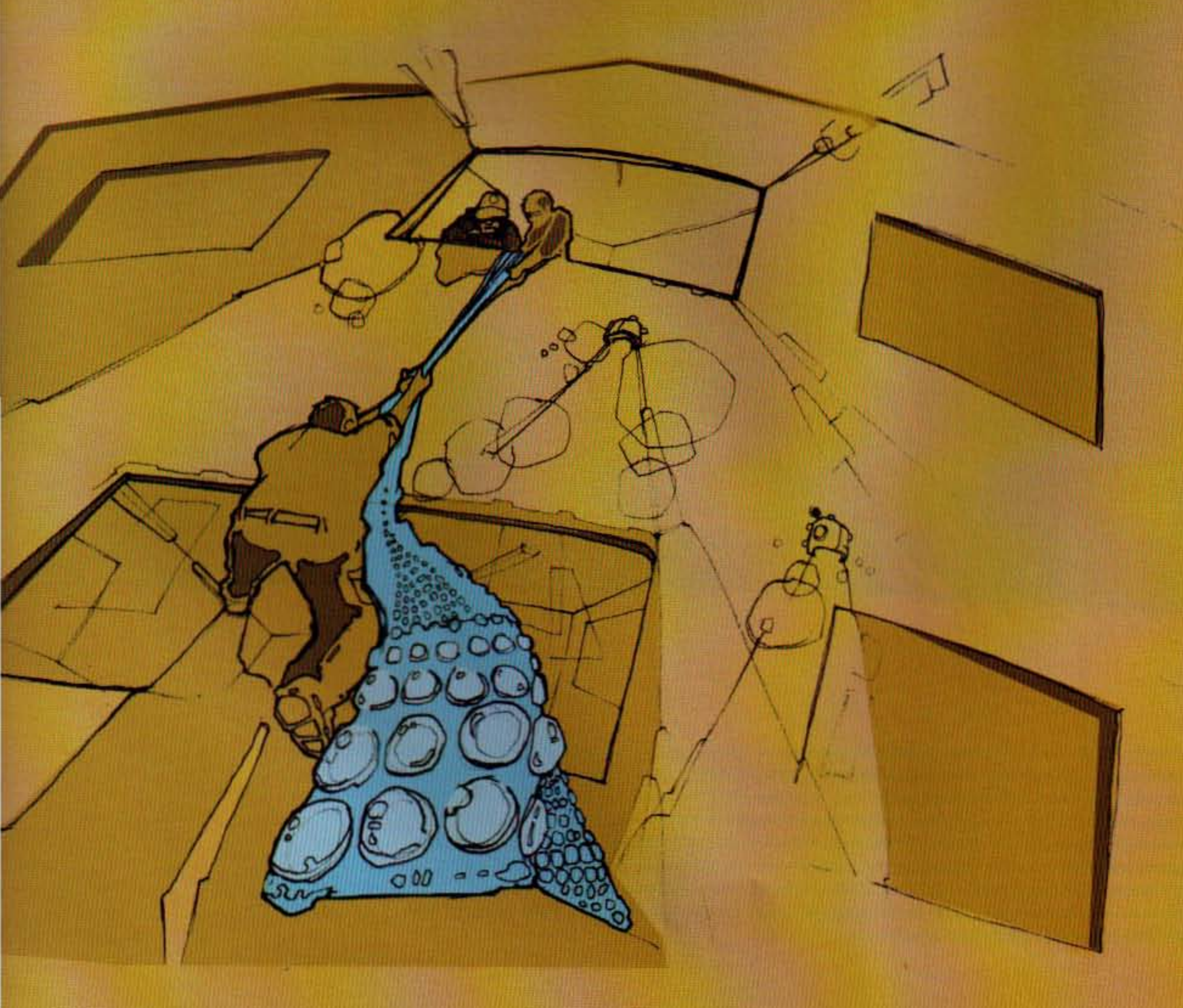
Is the laptop all right?

'There was this programmer who was once working on a high-pressure AAA licensed product that had to be out in time for Christmas. Because of the tight deadline constraints and the amount of hours he had to put in to the project, he often worked at home as well as working in the office. For that reason he had bought himself a laptop so that it would be easy for him to bring his work home with him. He also had a fast sports car, as programmers sometimes do, so that he could whizz backwards and forwards between home and the office very quickly. However, his route home took him on a precarious trip through a forest and along a twisting road through some steep, hilly countryside. One night he'd been working late at the office and was driving home with his laptop in the boot of his car so that he could put in some extra hours when he got back home. Being tired and in the pitch black he misjudged a bend with a steep drop on one side and went hurtling over the side into the darkness below. The car was an absolute mangled wreck. The following morning, and with great concern etched on his mind, the programmer's boss rang his publisher to tell them the awful news: "I'm very sorry. I'm afraid our programmer on your AAA Christmas title crashed his car over the side of a steep cliff last night".

"Oh, Jesus!" said the publisher.

"Don't worry, though – we've recovered his laptop and checked the source code and it's all okay!" replied the programmer's boss. To this day, I still don't know what happened to that programmer.'

Anonymous



Raided by the vice squad

'When I was at [big industry company, still going strong today], we had a licence to do conversions of a number of arcade games. The game this story involves had a cute cartoon animal as the main character. Anyway, there was this guy called Jeremy Smith, who had just started a company called Core. He knocked on my door, and I knew him of old, so we gave him his first work doing a conversion of the game – and he did a very good job. However, unknown to me, there was a cheat version. In the game, there was a princess kidnapped, and the cute animal goes after her. At the end of the proper version, he gets the princess and gives her a big kiss. But in the cheat version, he actually had a huge penis, and gave her a good seeing to. I didn't actually know about this.

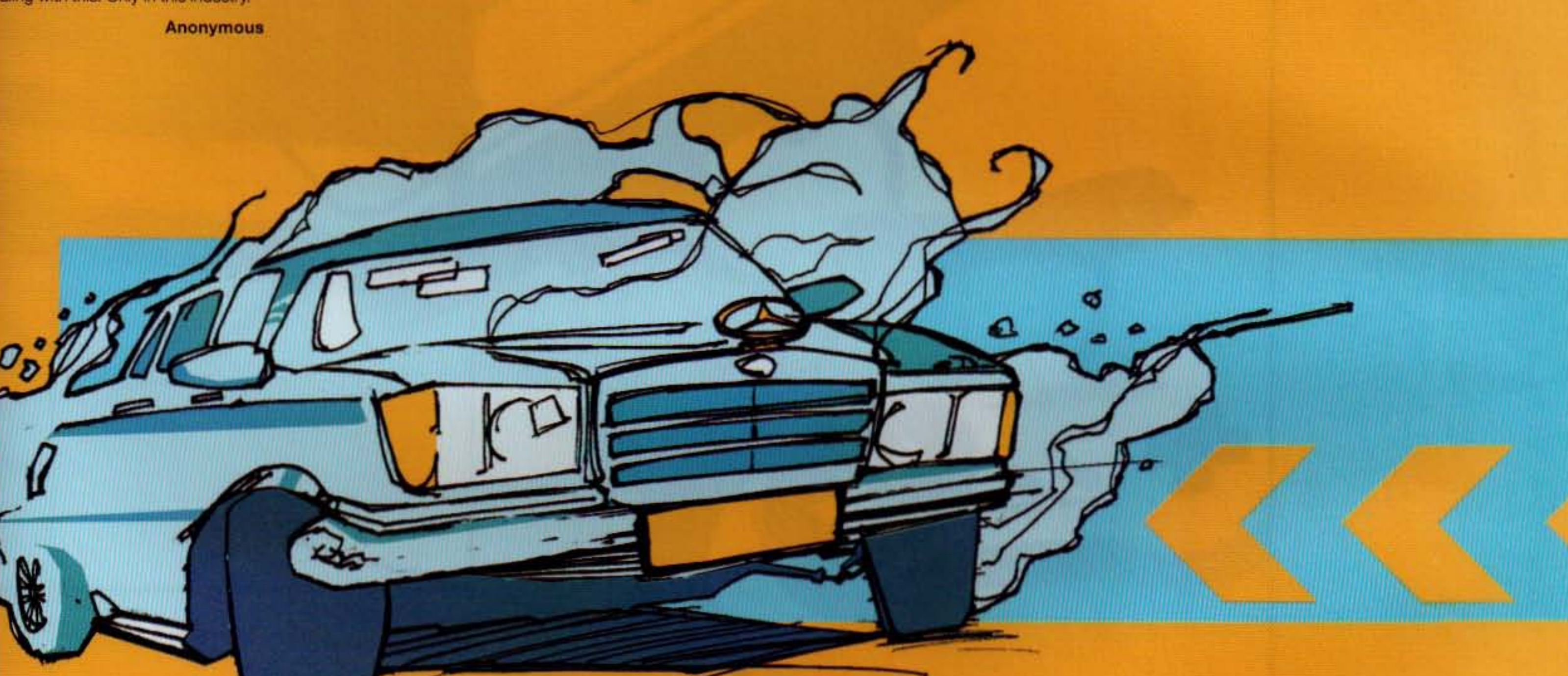
It wasn't a problem at first, because no one actually discovered it – it was a seriously obscure and well-hidden cheat. Until, that is, I was driving along Wandsworth Bridge Road, and my mobile phone went. It was Geoff Brown, who was working for a company who had licensed the game from us to put on a compilation. And he says: "Charles, you've got to help me!" I say: "Look, what's the matter, Geoff?" He says: "I've got the Birmingham vice squad in!" I say: "Why? Why, Geoff?" And he says: "We licensed this game from you, and you finish it, and at the end the creature gets a huge great penis out!" We'd given him the wrong version. We'd given him an earlier, pre-release version, where the alternative ending happened regardless. He'd put the game on a compilation, and thousands of these things had gone out. So there were kids around the country playing this game, and anyone who reached the end was going to see this real obscenity. I'll never forget that one.'

Charles Cecil

Nutz to that

You won't believe this, but when Infogrames was Ocean, it released a game called *Mr Nutz* (on Game Boy, I think), which was developed by Probe. Halfway through development, the lead programmer (who shall remain nameless) decided that he wanted – sorry, needed – to become a woman. This set the project back by months. Then when the newly reformatted lady came back to work, she decided that she needed more time off because she had decided that she was now a lesbian and was having trouble dealing with this. Only in this industry.'

Anonymous



Redline research drives team into ground

'We were producing a driving game and we wanted to record the sound of a Mercedes. However, we couldn't get hold of a car from a dealer, so we decided to rent one. We took it up to the MIRA research labs, put it on their rolling road, and put it through its paces. Now, our sound guy was redlining it through all its gears, trying to get the full range of sound, when, suddenly, the engine just goes bang. We didn't have a clue what to do at first. I mean, the car's in the MIRA lab, and that's not the kind of thing that you're really covered for when you rent a Merc.

Eventually, we decided to push to car through the country lanes until we got to a spot sufficiently far away from the lab. At this point, we call the AA. When they arrive, we say: "Well, we were just driving along, and the engine just went." He takes it back to the rental place, and they're really apologetic – they even gave us a full refund of the rental money.

So there we are, thinking that not only have we got away with it, we've also got a refund. Unbeknownst to us, however, the car has been sent back to Mercedes' head office. They run tests on the car to see what happened, and it has an onboard computer, which had recorded everything. In the data they read, it shows clearly that someone has been redlining the car, really punishing it. They got in touch, and they knew what we'd been up to. Of course, the damage had to be paid for – it came to about seven grand, which our publisher had to pay.

Anonymous

The generation game

INSIDE NINTENDO

I realise that Nintendo keeps saying [that the Ultra 64 will be released in] 1995, but there is absolutely no evidence to support that. What they did in Chicago [at the 1994 Summer Consumer Electronics Show] was show people the coin-op hardware which has absolutely no connection with the Ultra 64 from an internal standpoint. No way, Jose. It's a big promotional head fake.

If he [Nintendo vice-president Peter Main] told you six months, mark your calendar and call him on that date. He'll tell you "no, six months from now," and he'll still be blowing smoke at that point.

Trip Hawkins
founder, The 3DO Company

Edge presents a snapshot of the videogame industry's evolution with an exclusive excerpt from **Steven L Kent**'s seminal account, 'The First Quarter'

On August 23, 1993, Nintendo announced plans to collaborate with Silicon Graphics on 'Project Reality', a new technology that would be incorporated into a future game console. The pairing seemed perfect. Silicon Graphics was the leading company in high-end computer

The silicon Nintendo hoped would see off Sega and Sony

The first incarnation of Nintendo's 64bit dream

Ex-NOA president Howard Lincoln, now CEO of the Seattle Mariners

graphics. Hollywood special-effects studios used their workstations to create the effects in such movies as 'Terminator 2' and 'Jurassic Park'. The new system, which Nintendo claimed would be released in 1995, would include a modified version of the technology used in Silicon Graphics' expensive Indigo workstations and sell for under $250. Nintendo would not give many specifics on what the system's architecture would look like, but it was stated that the final product would have a 64bit processor.

He's [Howard Lincoln] convinced that the new Nintendo momentum will carry over into 1997. "One of the things I find most incredible," he says, "is how anyone could possibly conclude that Nintendo will not have a predominant share of the next-generation platform. We have the best technology – namely Silicon Graphics' proprietary technology. Mr Nakayama [Sega's president] wanted that technology as badly as Yamauchi [Hiroshi Yamauchi, president of Nintendo Co., Ltd.], but Yamauchi got it," he says. "Sega and Sony have world-class 32bit systems. But unfortunately for them, we will be marketing a world-class 64bit system at the same time."

Kathleen Morris
in *Financial World*, February 21, 1995

In 1994, Nintendo kept up a fairly regular rhythm of announcements. In March, Nintendo of America chairman Howard Lincoln announced that the British developer, Rare, Ltd., would make games for Nintendo's new Project Reality console. This announcement was made two months before the unveiling of *Donkey Kong Country*, so few people knew anything about Rare. A quick scan of old Nintendo cartridges would have revealed that Rare was the company behind *Battle Toads*; but that was the only thing anyone outside of Nintendo knew.

On May 2, 1994, Nintendo announced that a Scottish firm called DMA Design had signed up to do games for Project Reality. No better known than Rare, DMA had one significant claim to fame – it was the company that created *Lemmings*, Psygnosis' one big game. Three days later, Nintendo announced that Project Reality would use cartridge media instead of CD-ROM. This was a much more significant announcement.

At the time, Howard Lincoln claimed the reason Nintendo decided to stick with cartridges instead of moving to CD-ROM was speed. With CD-ROMs, game consoles access information and load it into memory. These access times could take a few seconds with early CD-ROM drives such as the ones used in Sega CD and 3DO. Nintendo said waiting for the games to load up diminished the experience. Because cartridges have ROM chips built into their circuits, access time is not a problem.

What makes Nintendo's platform so much cheaper than competing machines is the lack of a CD-ROM drive. Critics claim this is a great weakness. Everyone thinks the transition to CD-ROMs is inevitable because they can be manufactured much more quickly and inexpensively than cartridges. They also have much more memory, which allows developers to throw in movie and music clips. There is a problem, however. There is a difference in data-access speed of 1,000 times. To get around this, companies have had to build in lots of internal memory in the machines. But that is expensive. For software houses, it is cheaper to make CD games, but Nintendo says its cartridges will be priced the same as CDs and that for hot titles there will be plenty of margin for profit.

Kathleen Morris

Cartridges are a very expensive medium, however, and many game developers resented Nintendo's decision to continue using it. Sony's licensing structure was built around a $10-per-game arrangement that included manufacturing discs, manuals, and packaging. Compared to the cost of pressing CDs, manufacturing cartridges for Project Reality would be prohibitively expensive. At the time, it cost more than $20 to manufacture an 8-megabyte cartridge compared to less than $2 to press a 640-megabyte CD. And the additional storage space on CDs could be used for video clips, animations, audio files, music, and larger games. Even as Lincoln told the media that Nintendo had forms of compression that would vastly increase the amount of information that could be crammed into an 8-megabyte cartridge, it was widely accepted that Project Reality games would simply be smaller than those on Saturn and PS.

Speculation about why Yamauchi had chosen cartridges ranged from curiosity to antagonism. Tom Zito, founder of Digital Pictures, said that Nintendo went with the cartridge format because cartridges are harder and more expensive to copy – making it easier for Nintendo to avoid piracy. Other game-company executives claimed Nintendo went with cartridges so that it would have complete control over the manufacturing of games for the console and maximise its profits.

It was a combination of things. There was a technology element to it and there was that counterfeiting element to it, big time.

The technology argument, I think, at the time was legitimate… At the time, Takeda [Genyo Takeda, the Nintendo engineer working with Silicon Graphics to design Project Reality] and those guys felt very strongly that it was absolutely essential to have it on a cartridge in order to do the kind of things that we wanted to do with Super Mario.

The counterfeiting thing, I think, turned out to be correct with the huge counterfeiting problem that Sony has.

I've seen speculation about how this was some plot to control thirdparty publishers. That's completely nonsense. There is just not a grain of truth in that thing. No discussion like that ever occurred; that was never an issue. It was strictly technology and counterfeiting.

Howard Lincoln
former president, NOA

In the days leading up to the 1994 Summer Consumer Electronics Show, Nintendo made two more announcements. On June 5, Lincoln announced that Alias Research, one of the leading computer-graphics companies, would create custom software tools for Project Reality. On June 23, Lincoln announced that the final name of Nintendo's new console would be 'Ultra 64', and that Acclaim Entertainment would create a game called *Turok: The Dinosaur Hunter* for it. Then came the closed-door meetings at CES in which reporters and analysts were shown glimpses of *Killer Instinct* and told they were running on prototype Ultra 64 hardware.

On January 5, 1995, Nintendo announced that Silicon Graphics had completed the final chip set for Ultra 64 and gave the console's final specifications. Critics, such as Trip Hawkins, openly challenged Nintendo's assertion that Ultra 64 would be ready in 1995. But with the announcement that the chip set was complete, Nintendo's claim that a powerful system would be ready later that year seemed more believable.

According to the announcement, Ultra 64 would indeed have a 64bit processor – easily the fastest processor in any of the next-generation consoles. Ultra 64 would also have a separate graphics processor that could generate 100,000 texture-

mapped polygons per second while handling several graphics-enhancing processes such as ray-tracing, anti-aliasing, and trilinear mip-mapping interpolation – processes that that were not available on PlayStation or Saturn.

After announcing that the chip set was complete, Nintendo began disclosing new partnerships with more 'dream team' developers. Williams Manufacturing, the arcade company behind such Acclaim cartridge hits as *NBA Jam* and *Mortal Kombat* joined on, as did noted PC flight simulation publishers Sierra and Spectrum HoloByte. Angel Studios, a computer-graphics company best known for making special effects for movies, and Paradigm Simulation, a company that designed high-end virtual reality software, joined the team. Then Ocean of America and GameTek – two game publishers with reputations for mediocre games – joined the dream team, and the team started looking haphazard. Once, when asked why he selected Ocean as part of his 'dream team', Lincoln was unable to stop himself from laughing. When he was able to respond, he smiled and said, "I'm surprised you did not ask, 'Why GameTek?'."

But Ultra 64 was not the only 'next-generation' system Nintendo planned to release in 1995. Nintendo's research and development Team 1, led by Gumpei Yokoi, had created a portable game system called Virtual Boy.

Compared to the multimillion colour-producing consoles being created by Sega, Sony, and Nintendo, Virtual Boy was an anomaly. Supposedly the heir to Game Boy, it had single-colour graphics. The system was built around red LED arrays, so it only showed red objects against a black background. The catch, however, was that it had two mirror-scanning stereoscopic displays that enabled it to create the illusion of three-dimensional objects. Reflections Technology, a Massachusetts-based company that was not normally associated with games, had created Virtual Boy's stereoscopic LED technology years earlier. But marketing the idea to game companies had proved difficult.

I turned down Reflections Technology twice. They came to me when I was with Mattel and showed me this thing called 'Red World'. Then they came to us before going to Nintendo and I looked at it and thought 'this looks very familiar'.

Tom Kalinske
former CEO, SOA

When Reflections Technology took their idea to Nintendo, they found a willing advocate in Gumpei Yokoi. Yokoi, who designed Game Boy, was looking for a new technology that might "encourage more creativity" in games.

I saw that the market was so saturated with videogames that it became nearly impossible to create anything new. There were a lot of creative ideas for games for the NES and for Game Boy. But there were not so many new ideas for games for the Super Nintendo. I think game companies ran out of new ideas. I wanted to create a new kind of game that was not a videogame so that designers could come up with new ideas.

Gumpei Yokoi
Game Boy inventor

Yokoi appears to have been less than excited about creating a system with a single-colour display. He looked into making a colour version of the technology but found that it would have to retail for over $500, far too expensive.

In the beginning of the development, we experimented with a colour LCD screen; but the users did not see depth, they just saw double. Colour graphics give people the impression that a game is high tech. But just because a game has a beautiful display does not mean that the game is fun to play.

I also wish to explain that LEDs come in red, yellow, blue, and green. Red uses less battery and red is easier to recognise. That is why red is used for traffic lights.

Gumpei Yokoi

As the project progressed, Yokoi made his new game console less like a virtual reality head-mounted display and more like a Viewmaster. Deciding that head-tracking caused motion sickness, he created his system without tracking technology. Then he decided that wearing a heavy helmet was uncomfortable, so he mounted the unit on a stand. Instead of a visor, he ended up with a console shaped like a diver's facemask with a rubberised seal for blocking outside light.

Nintendo first announced work on a virtual reality project in the summer of 1994. In November, the console was unveiled at Shoshinkai, a proprietary trade show Nintendo held in Tokyo every winter. The general reaction was less than favourable. One reporter dubbed the system 'Virtual Dog'.

At the show, Nintendo announced that Virtual Boy would retail in Japan for ¥19,800 yen (approximately $207). Show attendees seemed unimpressed by the hardware and equally unimpressed by games, which included a remake of the 1981 arcade classic *Mario Bros*, a pinball simulation, and a boxing game called *Telero Boxer*. Of the three, only *Telero Boxer* tried to take advantage of Virtual Boy's 3D capabilities.

Even worse, several people who tried the system complained about having headaches after using it. Players needed to focus the mirrors inside Virtual Boy before every use to avoid getting headaches. And even if they did, staring at the red-and-black screen for prolonged periods of time could still produce headaches or dizziness. By the time Virtual Boy came to the United States, it bore a statement warning that extended use could cause headaches.

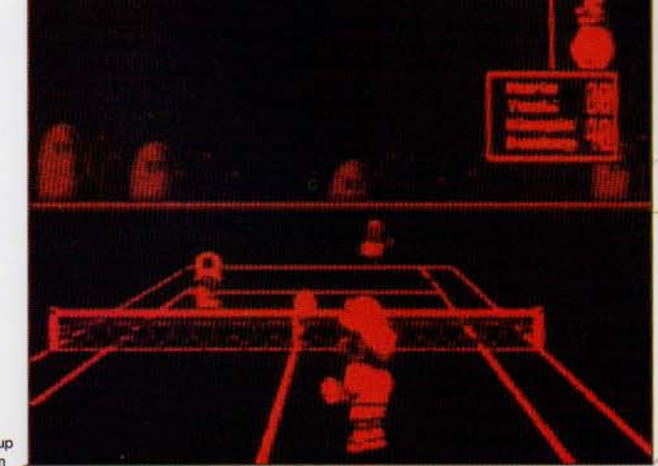
In January, 1995, Nintendo of America unveiled Virtual Boy at Winter CES in Las Vegas but did not give specific launch information and only showed the partial games that were shown at Shoshinkai. For final launch information, reporters would have to wait for E3.

NINTENDO COMES CLEAN

On May 4, 1995, a *Wall Street Journal* reporter named Jim Carlton interviewed Greg Fischbach about Acclaim's annual report. As he reviewed the report, he noted that while Acclaim had earnings projections for Saturn and PlayStation sales, there were no projections for Ultra 64 sales. When he asked Fischbach about this, Fischbach quickly said, "No comment."

Armed with this information, Carlton called Nintendo marketing and communications manager Perrin Kaplan and told her what he had found. She said

Virtual Boy's limitations were manifold, although inducing headaches was perhaps its most severe



Even Mario couldn't serve up an ace and save the system

Bundling the triple-A title *Virtua Fighter* with hardware was an obvious tactic

Even with a five-month lead to market, Sega's 32bit unit was crushed by Sony

Ex-Sega America chief Tom Kalinske, the man charged with shifting $400 Saturns

she understood and asked for one hour to prepare a response. Kaplan went directly to Howard Lincoln, chairman of Nintendo of America, and Minoru Arakawa, president of Nintendo of America, and told them what had happened. With no other option, they admitted that Ultra 64 would not be released in 1995, and Carlton had a scoop for next day's paper.

The next morning, Howard Lincoln came in early and called reporters around the country to warn them about the Wall Street Journal article and to let them know that Ultra 64 would not be out for another year.

THE REALLY BIG SHOW

The first Electronic Entertainment Expo took place in the Los Angeles Convention Center on May 11-13, 1995, and all the major players were ready to put on a show. On the first day, Tom Kalinske, president of Sega, and Olaf Olafsson, president of Sony Electronic Publishing, were scheduled to give keynote presentations from 8:30am to 9:45am. Kalinske discussed Sega's heritage in arcades and as a game company. He announced that the retail price of the Saturn would be $399, then began describing what a powerful system it was. Then he gave the punchline – the console had already shipped. September 2, Sega Saturn Saturday, was still going to be the official launch date for Saturn, but 30,000 systems had already been shipped to four key retailers: Toys 'R' Us, Babbages, Software Etc., and Electronics Boutique.

Next came Sony's turn to drop a bomb. Olafsson was supposed to discuss 'what it's going to take to be successful storytellers in coming years'. The topic obviously gave him room to discuss the technological strengths of PlayStation, and he was expected to announce the system's price and launch date. At the time, it was generally assumed that PlayStation would likely be as expensive, or possibly more expensive, than Saturn. Olafsson started his speech as expected, then interrupted himself.

Olaf [Olafsson] was about two-thirds of the way through his speech when he said, "I'd like to call up Steve Race to tell you a little bit more about the Sony PlayStation." So I walked up. I had a whole bunch of sheets of paper in my hands, and I walked up, put them down on the podium, and I just said, "$299," and walked off stage to this thunderous applause.

Steve Race
former CEO, SCEA

Sony clearly won the first battle of E3. By sending Saturns to four retailers only, Sega offended several of its best outlets. Kay'bee Toys responded by dropping Sega from its lineup. More importantly, releasing in spring or summer, typically slow seasons for videogame hardware sales, did not give Sega any advantage. Having a surprise launch meant that Sega had forfeited any chance of having a big send-off for Saturn and gave the appearance of being afraid of head-to-head competition with PlayStation.

I think Japan was scared of PlayStation; at least more than we were in the US. Tom was not afraid. Tom was ready to go to battle because Tom was used to hardware that wasn't necessarily the best in the market anyway.

Michael Latham
former head of Omega Team, SOA

Sony's surprise was more effective. Even though Saturn came bundled with a highly desirable game, *Virtua Fighter*, it was too expensive for the consumer electronics category. The $399 price point was known to be more of a high-end electronics ticket, something that people might pay for a stereo component but not for a videogame console. Sega was making the same mistake Trip Hawkins had made with 3DO.

I'm sure that price came from Japan. Tom was frequently dealt some very difficult cards to have to play, and he did a very good job of melding his deck and doing as much as he could with the cards that he was dealt. My hat is off to the guy.

Steve Race

While Nintendo, Sega, and Sony threw million-dollar parties at E3, Trip Hawkins held a quiet and elegant dinner at a fine restaurant. In his typical socially graceful fashion, he left one seat open at every table and shuttled from one table to the next through the meal so that he could speak with all of his guests. During the meal, a reporter asked him what he thought of Sony. Sighing and looking a bit tired, Hawkins replied, "For a company that is so new to the industry, I would have hoped that Sony would have made more mistakes by now."

Nintendo executives focused on Super NES, Game Boy, and Virtual Boy rather than Ultra 64. There were no Ultra 64 prototypes for guests at the Nintendo booth, and by this time everybody knew that Nintendo had no plan to release the console in 1995. Lincoln did announce, however, that Virtual Boy would come out in August for a suggested retail price of $179. Nintendo's other big announcements were three Super NES game – *Donkey Kong Country 2*, *Killer Instinct*, and *Yoshi's Island*[1].

THE LAUNCH SEASON BEGINS

One of the problems with launching Virtual Boy, along with the general lack of interest most consumers had in the product, was that the only way to see its 3D images was to place your face against it. This meant that shoppers would not see the 3D images as they walked past them in stores. Also, the system could not be effectively demonstrated on television.

Virtual Boy was released on August 14 to generally lacklustre reviews. Although reviewers at *Entertainment Weekly* and *Popular Science* gave it glowing reviews, game magazines panned it.

By mid-August, the industry had already lost interest in Virtual Boy as Microsoft became the focus of worldwide attention. On August 24, 1995, Microsoft launched Windows 95 (Win95), a major upgrade from previous Windows operating systems that included technology for running games smoothly. Though Microsoft published a few games to accompany the launch of Win 95, it would take months before people realised the deep impact the new operating system would eventually have on gaming. By the end of the year, people would even be able to play firstperson shooters without leaving the Windows environment, making computer game installation suddenly easier.

Though it did not make computers as simple to use as consoles, Win 95 went a long way toward closing the gap. Computer games did not catch up to console games in overall sales, and the top console games still sold at two to three times the rate of the top PC titles; but videogame publishers began eyeing PCs as a viable new platform.

The next big event was the September release of PlayStation. One person who was not going to see this release, however, was Steve Race. On August 7, Race resigned as president of Sony Computer Entertainment of America and resurfaced quickly at Spectrum HoloByte. Few people were surprised by Race's departure; his ongoing battles with his employers in Japan were well-known.

We had celebrated differences of opinion as to where the product should be and how it should be priced and positioned.

Panasonic's M2 only ever existed in prototype form

A Jaguar CD-ROM add-on was to save the format. It stood little chance

I wouldn't say we had screaming matches, but we just had long pregnant pauses, and I questioned their heritage, from whence they came… something about female dogs.

Steve Race

Sony shipped 100,000 PlayStation consoles for release on September 9, almost all of which had been pre-reserved. The entire shipment sold out. Two days after the release, Sony had already sold more PlayStations than Sega had sold Saturns in the five months since the surprise announcement at E3. By the end of the year, Sony boasted of having shipped 800,000 PlayStations into North America while Sega claimed to have sold 400,000 Saturns.

We told people we would ship on September 9. We shipped on September 9. We told them we'd have 10 to 15 titles in the first 30 days, and we had 15 titles in the first 30 days. We said we'd have 50 new titles out by the end of the calendar year. We had 55 out by the end of the calendar year. We built credibility not only with the consumer, but with the trade.

When you have two competitors as firmly entrenched as Sega and Nintendo, which are both great companies, make no mistake about it, you have to differentiate yourself. I think we did that.

Jim Whims
former executive VP, SCEA

In the meantime, things unravelled for 3DO and Atari. As far as the public was concerned, Nintendo had blown a hole in 3DO's claims of technological superiority with *Donkey Kong Country*. In 1995, Crystal Dynamics released a game about a wise-cracking Hawaiian lizard called Gex which brought the same highly polished graphical look to 3DO and supplemented it with voice files that would never have fit in a Super NES cartridge. Standup comedian Dana Gould performed the voiceover for Gex, the main character in the game, giving the game a certain charismatic wit. Realising that Gex was the most sure-fire game in the 3DO line-up, Panasonic bundled it with their version of the console[2].

Gex and other highly improved games were not enough; 3DO had already lost its position as the most desirable game console the moment Tom Kalinske announced that Saturn had already shipped. By the time Sony launched in September, the only tricks 3DO manufacturers Panasonic and GoldStar had left was to offer rebates and to bundle more software. As one GoldStar print ad stated, 'The GoldStar 3DO system is jammed full of space-age technology and comes with lots of FREE stuff'.

3DO's window of dominance had been shut, and in his own evangelical way, Hawkins helped close it. Seeing that there was no way to compete with Sega and Sony, he began talking about the disappointment of the 32bit generation and the real strengths that 64bit processing had to offer. Hawkins changed his focus to M2, a 64bit console that he promised would shame PlayStation and Saturn. M2 never materialised. 3DO sold the technology to Matsushita for $100 million, and though many game companies did receive M2 development kits, no M2 systems were ever released.

Things were even worse at Atari. Atari president Sam Tramiel struggled to find ways to bolster sales and cut costs. In 1995, he stopped manufacturing Jaguars and concentrated entirely on selling off the existing inventory. He slashed the price of the console to $149, released an attachable CD-ROM peripheral, and openly courted new game developers. He ran infomercials to try and sell additional consoles, but the infomercials did not reach the right audience. Toward the end of 1995, Atari finally convinced WalMart to carry Jaguar in its superstores, but by that time people knew about Saturn and PlayStation and weren't interested. Nothing seemed to work. The company was haemorrhaging money. The end came when Sam Tramiel suffered a mild heart attack and his father, Jack, came in to run the show in his absence.

Sam had just finished riding a bicycle. He got off the bike, felt somewhat faint, felt a pain in his chest, drove himself to the Stanford Medical Center, and there he was informed that he had a mild heart attack.

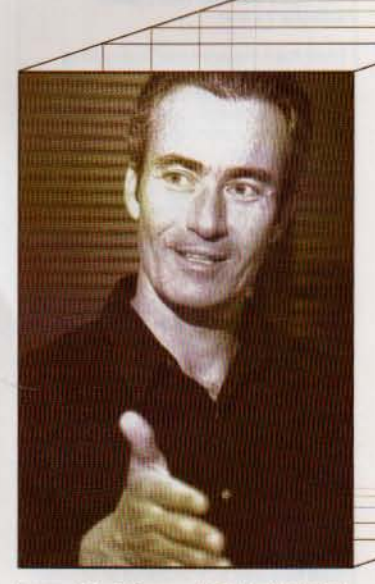
Jack came back in [to Atari while Sam was recovering]. Jack knew how bad it was. It wasn't that Jack didn't know, Jack knew. Jack knew all the numbers, all the time.

Bernie Stolar
former president and COO, SOA

There were many theories about why Jack Tramiel purchased Atari. Some people said that he bought the company as a means for exacting revenge on Commodore, the company that he founded then left under unpleasant circumstances. Another theory was that he purchased Atari to make one last fortune, enough money to insure the future of his three sons, Sam, Leonard, and Gary. A third theory suggested that he bought Atari as a way of bringing his sons together. If any of these were his reasons, he succeeded. Atari outlasted Commodore, had a few enormously profitable years, and united his sons in a common goal.

On February 13, 1996, Atari Corp merged with JTS Corporation, a company that manufactured 3.5-inch disk drives, in an $80 million stock swap. Jack Tramiel was active on the JTS board after the merger. Two years later, Hasbro Interactive purchased the Atari library from JTS.

We were trying to license four products including Centipede, Missile Command, Tempest, *and* Pong. *During the licensing arrangement, we realised that JTS was in financial dire straits, so we decided to take it to a higher level. So we moved very quickly and very aggressively and turned this into an acquisition opportunity. We acquired all of the trademarks, patents, copyrights, and intellectual property for all of Atari. Jack Tramiel was involved in the discussions. He was a tough negotiator, as*



In evangelising M2 so vocally, Trip Hawkins helped to seal the fate of his company's 3DO format

Shoshinkai in 1995 was D-Day for N64, although only two games put in a showing

Crucially, Mario's 64bit arrival showcased the potential of the hardware's controller

Kirby's Air Ride, now long since cancelled, attracted negative feedback on its debut

always, but they needed money. The acquisition cost us $5 million.

Tom Dusenberry
president, Hasbro Interactive

Time Warner put Atari Coin-op on the sales block in 1996 as well. In an interesting twist, one of the first people to bid on it was Nolan Bushnell, the man who originally founded the company. Time Warner turned down his offer, however, and sold Atari to a familiar competitor – Williams Manufacturing.

NINTENDO UNVEILED

In late November, 1995, Nintendo finally unveiled its 64bit, cartridge-based game console at its Shoshinkai trade show, held that year in an cavernous warehouse-like convention center called the Makuhari Messe. As a proprietary show featuring only games for Nintendo systems, Shoshinkai was considerably smaller than E3 or the Tokyo Game Show. The entire show fit in one section of the Makuhari Messe and filled less than two-thirds of the floor.

Nintendo's next-generation console underwent three name changes by the time it was unveiled. First known as Project Reality, then Ultra 64, the final name of the console was Nintendo 64 (N64). While Nintendo had released many details about the new console during the months leading up to the unveiling, no information was ever leaked about the system's controller. Created by Genyo Takeda and Nintendo Research and Development Team 3, N64 had a new and revolutionary three-handled controller that featured both a traditional digital directional pad and a new analog directional lever. The D-pad, which was especially good for fighting games, worked a lot like a light switch. It did not read how hard you pushed, it simply noted when you pushed down on it and from what direction you pushed, then moved you in that direction at a constant speed. The analogue lever, on the other hand, responded to pressure. Push slightly to the right, and the character you were controlling would inch in that direction. Push the lever all the way over, and your character would run at full tilt.

We tried a motion-sensor wristwatch-style controller. We made a prototype and applied for a patent. Everything was good, but players didn't understand the internal mechanism and had trouble controlling it, so we abandoned it.

Genyo Takeda
manager, R&D Team 3, Nintendo Co., Ltd.

Hiroshi Yamauchi was clearly proud of the new controller. In a lengthy speech given the first day of the show, he said, "If you think this is just another game pad, than you know nothing about videogames."

Most of the floor space was dedicated to Super Famicom (the Japanese name for Super NES), with a fairly large section for Game Boy and a much smaller corner of the floor for N64. Obviously most of the people at the show crammed in around the N64 area, taking turns playing the only two games on display – *Super Mario 64* and *Kirby's Air Ride*. While the show ran smoothly, it was obvious that some decisions were not made until the morning of the show. When an American reporter emerged from the N64 area, Howard Lincoln approached him and asked what he thought of the game. "The *Mario* game was great, but that other game wasn't amazing."

"We're only showing one game," replied Lincoln, who had not been told about a last-minute decision to show *Kirby's Air Ride*.

THE LAST DAYS OF YOKOI

Across the floor of Makuhari Messe, in the corner farthest away from N64, Gumpei Yokoi manned the little booth where Virtual Boy was being displayed. As he always appeared when in public, Yokoi was impeccably dressed in a dark suit, crisp white shirt, and modest red tie. He was a thin man with narrow shoulders whose head always appeared slightly large for the tiny frame of his body. The touches of white along his temples added to his dignified air. Few people stopped by his booth, so Yokoi was able to personally demonstrate games to those who did.

This was his punishment, the Japanese corporate version of Dante's Inferno. Gumpei Yokoi, the engineer who had created Nintendo's first toys in his spare time, had been placed in the proverbial doghouse for creating the debacle that was Virtual Boy. Having received shipments of Virtual Boy less than one year earlier, Tokyo stores were now discounting it so heavily that customers could buy it for less than $100 – under half the original cost.

When employees make high-profile mistakes in Japan, it is not unusual for their superiors to make an example out of them for a period of time, then return them to their former stature. Such seemed to be the case with Yokoi. Yamauchi would pretend to have forgotten that Game Boy, *Metroid*, and *Dr. Mario* had all come from his team, leave him to man a booth with a dying product, then eventually bring him back into grace. So, armed with *Bound High*, a firstperson-perspective game in which players sat inside a bouncing ball and tried to steer it, and an adventure game called *Dragon Hopper*, Yokoi greeted buyers and the media and cheerfully tried to explain that there was still life in Virtual Boy. Not many people came by, but he seemed happy to have an audience when they did.

Yokoi left Nintendo the following August after spending nearly 30 years with the company. He started his own handheld game company and named it Koto, a word meaning 'small town'. (It is also the name of a classical Japanese string instrument.) His company's first project was a monochrome handheld game system that was similar to Game Boy but slimmer and with a better speaker and a larger screen. Yokoi's new game system had other nice touches, too. It had directional pads in two different corners so that it could be used to play games with either vertical or horizontal orientation. It also operated on a single AA battery. Yokoi licensed the new handheld to Bandai, Japan's largest toy manufacturer.

On October 4, 1997, Yokoi and a friend were involved in a small accident on the Horukiko Expressway in Kyoto when they rear-ended another car. Both men climbed out to inspect the damage and were struck by a passing car. While his friend suffered fractured ribs, Yokoi sustained much more serious injuries and died two hours later. As the father of Game Boy, his death attracted a lot of media attention. In the United States, Yokoi's obituary was read on National Public Radio and appeared in the *New York Times* and *People* magazine.

In 1999, Bandai released a new handheld video game system called WonderSwan. Though obsolete compared to Game Boy Color, WonderSwan was launched with some fanfare. One of the first games for the new handheld was a curious strategy game in which players tried to complete circuits of lines by adding tiles with junctions. The game was called *Gunpei*[3].

1 There is an interesting story behind *Yoshi's Island*. When Shigeru Miyamoto first demonstrated the game to Nintendo's marketing department, it was rejected because it had *Mario*-style graphics rather than the waxy, prerendered graphics of *Donkey Kong Country*. Rather than change to an artistic look he did not like, Miyamoto made the game even more cartoon-like, giving it a hand-drawn look. The second version was accepted.

Miyamoto, who is rightfully proud of his work, was offended that the first version was rejected. That same month, I interviewed Miyamoto and Tim Stamper, creator of *Donkey Kong Country*, together and noticed that Miyamoto was a bit hard on Stamper, making such statements as "*Donkey Kong Country* proves that players will put up with mediocre gameplay as long as the art is good."

In a later interview, Miyamoto admitted that *Yoshi's Island* had been a touchy subject at the time.

I think that it happened after Donkey Kong Country *had been introduced. In comparison with the graphics of the* Super Donkey Kong, *there was not enough punch to* Yoshi's Island. *That was what I was told by the marketing people.*

I intensified my hand-drawn touch on Yoshi's Island *from the initial part of the program. Everybody else was saying that they wanted better hardware and more beautiful graphics instead of this art.*

Even while I was working on the Super Mario World, *I was thinking that the next hero should be Yoshi. Other people have created the games based on Yoshi...* Yoshi's World Hunters, Yoshi's Egg, Yoshi's Cookie, *and so forth – games that I don't really like. So I decided that I should make an authentic Yoshi game.*

2 Once while visiting a game store, Gould asked a clerk if they had *Gex*. "It's pronounced Jex," the clerk replied. "It's about a dinosaur."

3 Several people who have written about Yokoi have used an 'n' instead of an 'm' when spelling his first name. While him name appeared with an 'm' on his business card, David Scheff chose to use the 'n' in 'Game Over', which may be a more appropriate representation of his name.

'The First Quarter', by Steven L Kent, is available exclusively online from www.amazon.com. The 466-page volume, which chronicles the development of the videogame world, from its primitive beginnings in the 1970s to its multibillion-dollar-industry status today, will be reviewed in next month's Out There.

Edge's review policy

Every issue, **Edge** evaluates the best, most interesting, hyped, innovative or promising games on a scale of ten, where five naturally represents the middle value. **Edge**'s rating system is fair, progressive and balanced. An average game deserves an average mark – not, as many believe, seven out of ten. Broadly speaking, scores correspond to the following sentiments: one: disastrous, two: appalling, three: severely flawed, four: disappointing, five: average, six: competent, seven: distinguished, eight: excellent, nine: astounding, ten: revolutionary

Videogames on the **Edge**

Titles slowing productivity this month

International Karate 2000

Having lost nothing in playability, the beat 'em up classic returns in excellent handheld form. **Edge** hopes the link-up option has been 'accidentally' left in.

(GBC) Virgin

Jet Set Radio

Almost certainly the most stylish game of 2000, talk of a sequel has inspired an inline return to the graffiti-marked streets of Tokyo-to.

(DC) Sega

Quake III Arena

The office games room has remained an impressive mess of wires this month as four joypads have been left permanently attached to the PAL DC deck.

(DC) Sega

Tony Hawk's Pro Skater 2

Identical to the PlayStation version in gameplay terms, sure, but improved draw distance and textures make this **Edge**'s choice for all digital grinding activities.

(DC) Activision

Size doesn't matter

It's the way games are shaped that counts

Does a game that lasts half as long but plays twice as hard deserve to be marked down in relation to its lengthier yet possibly less immediately exciting cousin? The question, raised by this month's excellent *Sin And Punishment* (below), has long intrigued **Edge**. Now, don't misunderstand – this isn't a chapter taken directly out of Infogrames CEO Bruno Bonnell's book of gamemaking, but rather a startlingly different argument. While Bonnell fears *FFIX*-like superproductions from a purely financial perspective, **Edge**'s concern is focused entirely on the resulting gaming experience. Anyone prepared to defend Infogrames on this occasion should perhaps recall that if the acquisition-crazed French giant cared about gameplay, *Driver 2* wouldn't have been forced to come out this side of Christmas. And arguably not on PSone, either.

Without getting into personal preferences, or even the fact that the two games are genres apart, would it be fair to penalise Treasure's lovingly created shooter, which crams a beautifully enthralling game into a 256megabit cartridge, simply because the equally compelling *Skies Of Arcadia* offers an additional 49 or so hours of playing time? What about the fact that by its very nature (as well as the fact that it is uncommonly well structured), *Sin And Punishment* is significantly more replayable than its RPG opponent?

No one is disputing that a brief yet exquisite gaming affair is infinitely better than a dreary, interminable, substandard piece of poorly executed nonsense mistakenly referred to as a game by deluded PR folk. Rather, why should two games offering comparable overall rewards be differentiated in terms of length? Did everyone who criticised *Metal Gear Solid* for its brevity forget just how astounding the experience had been even before the end credits had finished their parade? More doesn't automatically mean better. Take a look at the film world: do the extra 24 minutes in the special edition of 'Léon' make it a better film? Or does it substantially disrupt the pace and balance of Besson's work?

Over the last few years, as developers focused their attentions on filling up increasing amounts of storage space simply because they could, without ever wondering whether they should, while also misinterpreting consumers' demands for increased value for money as a desire for longer games, everyone appears to have lost sight of the main point, which is that a great game is a great game. If it's done properly, you won't have time to worry about how long it lasts.

Skies Of Arcadia

Format: **Dreamcast** Publisher: **Sega** Developer: **In-house (Overworks)** Price: **$50 (£45)** Release: **Out now (US) TBC (UK)**

Environments are continually shifting, each island radically different from its neighbours. The map shows the expanse of the world, allowing for free exploration

Maramba is arid and dusty, the score taking on an Eastern flavour. While the overall size of the gameworld may not be vast, the time required to fully interact with NPCs and explore the surroundings certainly is

The illusion of freedom should never be underestimated where RPGs are concerned. Having the latitude to go wherever you desire in the gameworld can tip the scales favourably, adding a sense of dimension absent from many traditional adventures. *Skies Of Arcadia* has managed to capture this feeling deftly, and yet the quality of this title as a whole results in even this aspect being partially eclipsed by other inclusions.

Several noticeable qualities have been renewed by Overworks, in a team led by female producer, Rieko Kodama, previously of the *Phantasy Star* series. Interestingly, a sizeable portion of her staff is also female, evidence of which is apparent through the game: this is not a dark RPG. While there are morose and tragic moments, the sense of friendship and balance between the sexes brings *Skies Of Arcadia* a refreshing slant. At least half the player party is formed of strong-willed yet amiable female characters acting as level-headed counterweights to the male protagonist, Vyse, a good-natured but impulsive fellow.

The other improvement is the theme, cut with swashbuckling heroes cruising the heavens in search of new lands and untold treasures. Such baubles are prised from the clutches of the Black Pirates – Vyse and companion Aika being members of the Blue Pirates, outlaws who owe much to the Robin Hood legend. Overworks also scores marks with its set designs, being more flamboyant and vibrant than gothic noir – more 'Fifth Element' than 'Blade Runner'. This sense of colour brings a more lively appeal, in turn attracting the casual gamer as well as the otaku. Forcing the latter to part with £40 is not the issue: *Skies Of Arcadia* aspires to be a game for all comers, irrespective of tastes or experience. Visually and aurally, this is as astonishing as Dreamcast gets, *Shenmue* included.

Battles continue the trend for innovation, being either character-based or involving ships gunning it out for aerial supremacy. Naturally, the turn-based standard is retained, allowing for strategy and chance, initially bewildering choices

Lighting is peerless, magic spells unleashing tremendous effects, no matter how lowly. Employing a monitor is virtually imperative

swinging skirmishes in either direction. The variety of foes is also broad, ranging from the tiniest snails to the most gargantuan of rock monsters, and you should expect to be bowled over by boss encounters. Magic can be advantageous, too, but is limited in use to a party's Spirit Rating, which increases with experience. Unfortunately, military scenarios occur too often, but do serve to accumulate character stats and plundered booty. There is always the option to retreat, should the threat be too great.

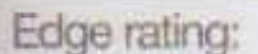
The real masterstroke, however, is in the 3D navigation system. Standard exploration occupies much of the proceedings, each environment lavishly depicted and populated by informative

Standard exploration occupies much of the proceedings, each environment lavishly depicted and populated by informative locals

Boss encounters are spectacular, but lengthy affairs. Tactics must be revised on the fly to taste victory

locals. Various themes come into play – desert, arable, and metropolis being worthy of note. Traversing the skies is manifested by a ship that can be sailed in realtime with the aid of an ever-expanding map. Crossing from one floating island to another takes time, and with many lands to explore plus unmarked locations to discover, the urge to set sail, Columbus-style, soon works itself into your subconscious. Couple this with a multitude of subquests plus a VM unit minigame, and the impression of limitless possibility takes on a solidity of its own.

Overworks' vision and passion has created an opus that, at times, borders on the incredible. What starts as enthralling very soon becomes exponentially more so. Gripping to the nines, extraordinary to behold, with rich character development and innumerable statistics, *Skies Of Arcadia* is a wonderful experience, and bodes well for all 128bit RPGs to come.



Edge rating: Eight out of ten

Imaginative sets and unusual designs are strong themes in *Skies Of Arcadia*. Floating rock fields and seafaring galleons make for a sense of colour and flair atypical of an increasingly dark genre

Changing the world

Travel in *Skies Of Arcadia* is a clever blend of overcooked random battles and totally free-roaming three-dimensional heavens. The ability to sail wherever takes the fancy adds size to an already enormous game. There are few obstacles to prevent the player from seeking out side stories, selling information to sailor's guilds, or simply challenging Valuan battleships with magical broadsides.

Final Fantasy IX

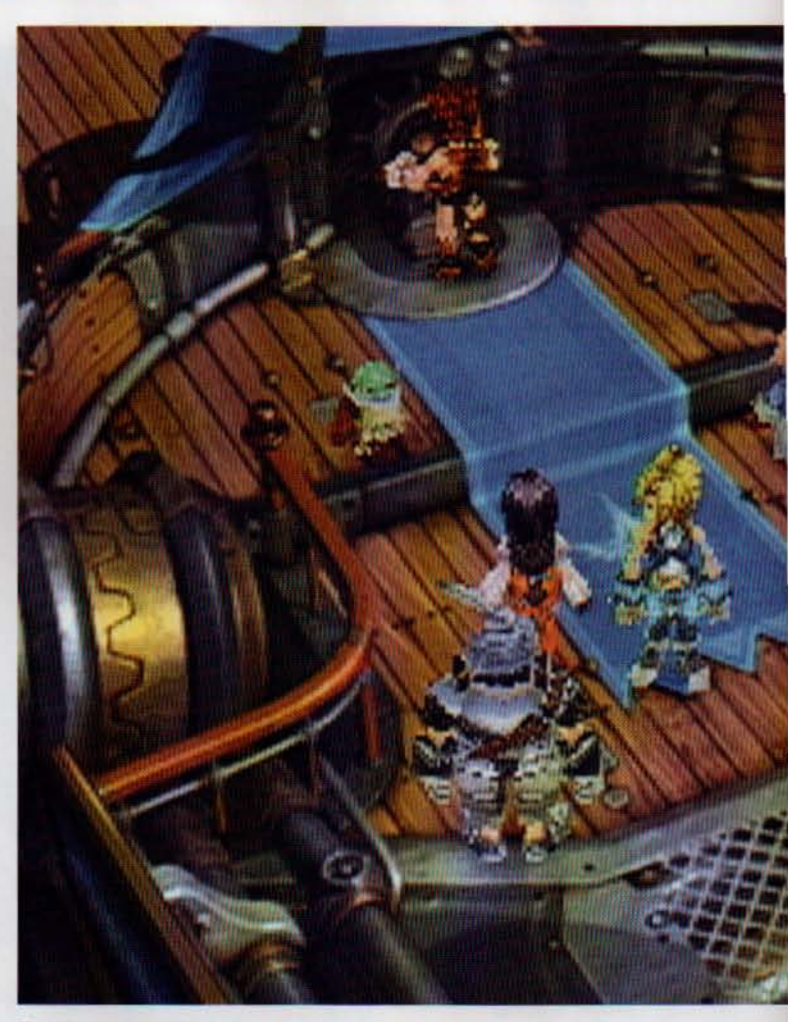
Format: **PlayStation** Publisher: **SquareSoft** Developer: **In-house** Price: **$40 (£28)** Release: **Out now (US) TBC (UK)**

Though casting a summon spell on three of the game's weaker enemies might be overkill, it serves to demonstrate their spectacular (albeit reduced) power

Final Fantasy VII thrilled the PlayStation faithful with swords, sorcery, epic battles, and its box-of-delights subgames. The following instalment tired them with overblown cutscenes, a more linear game model, and an uninvolving leather-jacketed retro-futuristic setting. Now *Final Fantasy IX* arrives, and it marks a return to the pre-PlayStation roots of the series. Superdeformed hero Zidane and his equally big-headed comrades make their way through prerendered screens, solving simple puzzles and suffering interminable random encounters.

Aside from the emphatic shift in imagery, improvements over the last release are many. Initially, the linearity remains, but by the third of the four discs enough subquests and minigames have made an appearance to divert from the endless fight against evil. Battles, too, are still executed in turn-based fashion, and are shorter thanks to cropped magic animations. Fans of the lengthy signature sequences for summoned demons will be pleased to note that they're still present, but those who found them testing on repeated viewing will be equally happy to see they're now skippable. Pleasingly, the player character now notices useful items independently, and illustrates them with an exclamation mark, meaning the aggravating slices of gameplay that consisted of sliding along a wall and constantly hitting the X button are near absent.

However, despite these obvious improvements, *Final Fantasy IX* remains imperfect. The supremely balanced combat contrasts starkly with the slow and sometimes uninvolving questing. Random encounters still seem like a throwback to a long-gone gaming era, and their presence is to the detriment of the game, particularly during journeys across the world map. The problem isn't anywhere near as acute as in the title's deeply flawed PS2 rival, *Summoner*, but it's exacerbated by an abysmal in-game map and, at times, a loss of direction. Business as usual, then – polished



The ship, received midway through the game, allows you and your party to travel across the oceans of the world map and reach otherwise inaccessible areas. Revisiting it lets you change your four-strong party

excellence, with flaws that'll be forgiven by those drawn into the fighting, talking, and subgames.

Chief among the subgames is a *Pokémon*-esque form of card combat similar to the one that hid beneath *Final Fantasy VIII*. The rules are reasonably complex, and are mostly unexplained. That confusion's necessary, since part of the initial drive to keep on playing is in order to understand what's going on. Once a vague idea of the game structure is understood, the motivation switches to collecting all the available cards. Most of the NPCs can be challenged, and victory means the chance to take part of their collection. The urge to catch 'em all is unquestionably addictive, and makes the subgame a perfectly suited addition to what, essentially, is a game for children.

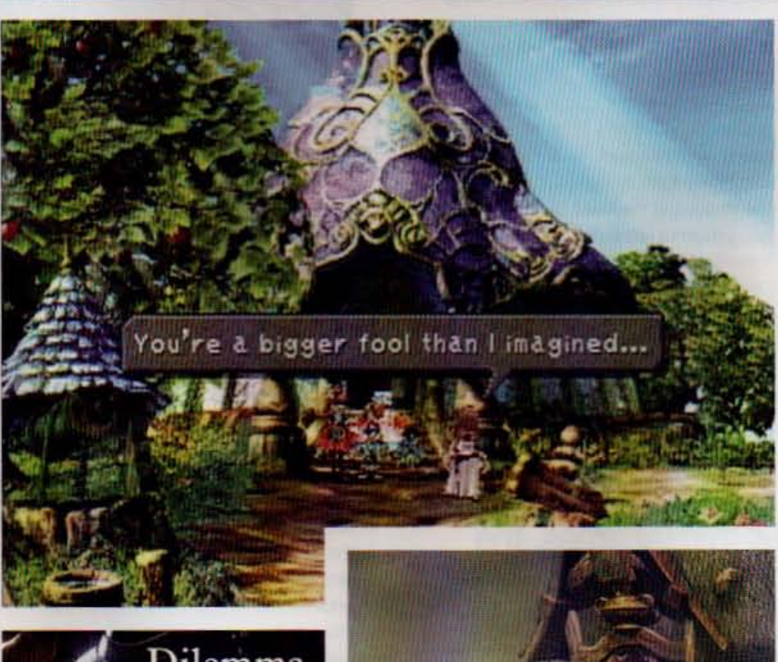
Adult Square obsessives who are snobbish about the series' perceived superior RPG status are missing the point. Yes, it's absorbing, and it's a far cry from the hackneyed D&D nonsense that pervades most quest-based games, but that's not to say it's better; it's just retarded in a different way. This isn't the RSC, it's a school play – the actors wander pointedly around the stage, speak their clichéd lines on cue, and then hang around aimlessly until the next scene. They're happy or sad, angry or calm. They're driven by simple goals, they

This marks a return to the pre-PlayStation roots of the series. Aside from the shift in imagery, improvements over the last release are many

find the occasional inner conflict and whisper it nervously to camera, but there's no real depth or complexity of emotion.

Everyone's a pawn. Everyone's a hero. Everyone's handicapped by their one, single weakness – pride, cowardice, greed, lust. The plot's not particularly predictable, but a school play's never going to shock, nor should it set out to. Like a benign 40-hour fairytale, you can read a little bit before you go to bed every night, and you know you won't have nightmares. It's comfortable, and if that's what entertainment is to you, *Final Fantasy IX* will cosily thrill.

Edge rating: Eight out of ten



From boggy marshes to woodland grottos, *Final Fantasy IX*'s locations will please those who found *FFVIII* too futuristic. It's a return to the roots of the series, but rarely gets bogged down in D&D nonsense

Owners of the previous two PlayStation *Final Fantasy* titles will be used to Square's gorgeous array of magical effects. In *FFIX* they're just as stunning, and benefit from being slightly shorter

Developing Fantasy

Though the basic principles remain the same, the turn-based combat has been tweaked again for the series' third incarnation on PlayStation. Eidolons have replaced the massive Guardian Forces, and weapons and armour make their return to the series. More importantly, four characters can now fight at once, and can take up stances to the front or rear of the action. As always, it's best to keep fighters to the front and casters to the back, and since members of your party are more specialised than ever before, it's easy to work out who should go where.

Hitman

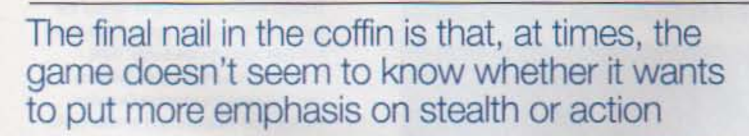
Format: **PC** Publisher: **Eidos Interactive** Developer: **IO Interactive** Price: **£40** Release: **Out now**

Cutscenes like the one above are just one example of *Hitman*'s polished veneer, but the game is surprisingly shallow, with missions demanding a considerable amount of patience and luck

Developer IO Interactive's foray into the burgeoning stealth action genre won't be the first title to feature a morally dubious pretext – in this case the milieu of the professional assassin. Rather than attempting to cynically engineer a media tumult, it would seem that *Hitman* is a genuine effort to use the seedy underworld setting as context for an innovative approach towards level design, wrapped up in an engrossing narrative, and given a rich graphical sheen. Sadly, as has all too often been the case of late, an original premise is let down by poor level design and clumsy controls.

After a short training level in an underground research facility, the storyline is elucidated through some atmospheric details dropped into mission briefings, as well as through the vivid locations and characters that your character meets – and, indeed, kills. From the (curiously empty) streets of Hong Kong to the Columbian rainforest and Dutch shipyards, the graphics engine proves more than capable of enhancing the ambience, while the cast of lowlifes you encounter includes a Scarface-esque drug baron, who becomes harder to hit as his chemical intake increases. Unfortunately, the mystery at the heart of the game is signposted too early, and the rocky transition from gritty realism at the outset to substandard genetic engineering fantasy come the conclusion is just one symptom of *Hitman*'s schizophrenia.

The unique selling point of the game's various levels is that each requires as much thought and preparation as actual action to complete. From the simpler missions that consist of requirements such as a straightforward sniper hit or the retrieval of a stolen idol, to the more complicated, multi-task stages, it is essential that adequate time has been devoted to reconnaissance and observation. But while this is an intriguing device, offering the potential for a variety of solutions to mission objectives, in practice the inadequate design of levels ends up curtailing player freedom and requiring levels to be restarted frequently. It is common for PC games to take advantage of quick saves to compensate for sloppy design, but this becomes even more pronounced when, as is the case with *Hitman*, the developer omits to implement such a function. There are too many missions that must be played through once or twice where the player simply watches and waits, before undertaking a short action sequence. The often pedantic approach towards realism can result in the feeling that you are actually playing a walking sim, or a painfully slow point-and-click adventure.



The final nail in the coffin is that, at times, the game doesn't seem to know whether it wants to put more emphasis on stealth or action

The game ventures away from settings you would expect from a hitman title, such as a mission which requires you to get past a sacred big cat without killing it. These ultimately cause the action to lose focus

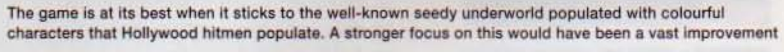
Compounding this, a trivial mistake can also require you to restart a mission – some of which can take up to half an hour to complete. With the control system introducing a large element of luck to proceedings, it can be all the more galling to perish through no fault of your own. Not being able to shoot someone because your gun barrel is poking through their chest, for example, is slightly frustrating, and there is an underlying tension between the quest for realism and the simplicity of game logic. It is inexplicable that a guard should notice your pulling out a garotte when he has just allowed you to circle him in a toilet cubicle, and it is not always clear how enemies will respond to disguises the hitman dons.

The final nail in the coffin is that, at times, the game doesn't seem to know whether it wishes to place more emphasis on stealth or action – with the final level ushering in an unprecedented focus on firefighting that jars with previous levels.

Unfortunately IO Interactive will have to take its good ideas back to the drawing board. *Hitman* is not the game it should have been. Despite lofty aspirations, it's ultimately frustrating to play.

Edge rating: Five out of ten

The game is at its best when it sticks to the well-known seedy underworld populated with colourful characters that Hollywood hitmen populate. A stronger focus on this would have been a vast improvement



The fibrewire garotte will prove to be a trusty companion throughout the game, but players must be careful not to eliminate too many civilians. Unfortunately it is not always clear exactly what constitutes a civilian

Lesson one: the long-range hit

Like any self-respecting action game, *Hitman* makes judicious use of the zoom lens, be it taking out a Triad leader or scouting out a heavily guarded Columbian compound. But later levels surrender the relative simplicity of sniper hits, and the resulting convoluted objectives don't work as well. Various concessions seem to have been made in order to heighten the mainstream appeal of the title, but these have actually resulted in the more interesting aspects of a hitman's vocation being neglected.

Escape From Monkey Island

Format: **PC** Publisher: **Activision/LucasArts** Developer: **LucasArts** Price: **£30** Release: **Out now**

If a cannibal uses a knife and fork, does that constitute progress? LucasArts, having once been the undisputed master of the of the point-and-click adventure, is often cited as being the only company capable of pouring oil on to the genre's dying embers. But *Escape From Monkey Island* either represents an obstinate refusal to innovate, or a frank admission: in truth, the codeshop can't take the genre any further. After having played *EFMI*, you wonder if anyone can.

With a pensionable design brief, *EFMI* is reprieved from a beckoning obsolescence by its slick production values and solid script

As with previous adventures, travel between specific locations on each island takes place on a 'map' screen. Surely this device has passed its sell-by date?

Over a decade after the debut of the series, this fourth instalment looks to the past for a modicum of inspiration. Melee and Monkey Island are reintroduced as locales, but scarcely resemble their bitmap forms of old. Guybrush and Elaine – main protagonist and love interest of previous adventures respectively – return from their honeymoon to Melee Island shortly after the game begins, only to find themselves embroiled in another complex battle against the ghost pirate LeChuck. Exploring Melee after the opening sequences are concluded, it's hard not to feel a pang of regret; competent as the stylised rendered backdrops may be, they aren't particularly evocative of the buildings they purport to represent. By overly adulterating what should be familiar sights and using new camera angles, *EFMI* lacks the nostalgic feel that it really should have. LucasArts appears to have missed its own point.

Like *Grim Fandango*, *EFMI* rejects a mouse-based interface in favour of keyboard or joypad control. By using a joypad or arrow keys you move Guybrush around, and a disproportionately large number of other buttons are used to perform various functions. In principle, this is a reasonable idea. As in its direct ancestor, Guybrush turns his head to view any interactive elements of the backdrop that happen to be nearby. This is designed to highlight essential items as least as effectively as the established practice of 'grazing' each screen with a pointer, but in practice it does not. *EFMI*'s iteration of Guybrush can be thoroughly annoying to control. His habit of reorienting himself on contact with boundaries – both visible and otherwise – can make simple movement highly cumbersome. Equally, it's far too easy to overlook requisite collectibles. Painstaking, methodical exploration of each screen is required to find the (occasionally tiny) objects needed to solve certain puzzles – which, given Guybrush's reaction to collision detection routines, can be enormously frustrating.

The standard of animation during cutscenes is worthy of note. Each character moves in a suitably comedic fashion, and there are plenty of small (but pleasing) touches – a far cry from the usual 'talking heads' format

The game is also blighted by problems indigenous to its genre. Graphic adventures have long been maligned for the often obtuse nature of their puzzles. Some, granted, consider that a desirable aspect of the challenge. Any gamer worth their salt, however, would surely refute the claim that using obscure items with every piece of scenery found within the confines of a map really constitutes a 'puzzle'. Miss a vital object, and every screen within a given area can become a barren wasteland, devoid of interactive substance. The title needs either an optional 'clue' system, cued to offer advice when players lose their way, or consistently plausible puzzles. It has neither, and often becomes more a test of stamina than of intellect as a result.

With a pensionable design brief, *EFMI* is reprieved from a beckoning obsolescence by its slick production values and appreciably solid, though rarely spectacular, script. Its ultimate forebear was distinguished by merit of being one of the few games ever to elicit genuine laughs from players. That isn't a feat that this iteration achieves, but it's certainly good for plenty of wry smiles and

Characters from previous adventures are reintroduced (above left), while previously explored areas such as Monkey Island are given new features (right). That said, *EFMI* rarely evokes the sense of nostalgia that it might

a few sniggers. Although its self-referential asides will bewilder newcomers, the standard of its dialogue is consistently good. The voice acting is unusually professional, and a world away from the dismal performances found in *Tomb Raider Chronicles*, *Resident Evil*, and others. Domonic Armato's Guybrush, in particular, is excellent.

As professional as *EFMI*'s production values may be, there is a curiously brittle quality to the transitions between each area. When the criteria for each section is fulfilled, the game abruptly switches to a concluding cut-scene, before sending the player off on another quest, on a different map. This serves to highlight the sensation of being a mere bit player, charged with joining the dots between movie sequences, witty conversations, and odd puzzles. There's still – a decade after the debut of the series – way too much onus upon running between disparate points of interactivity, often missing obscured, conundrum-related items en route.

In essence, *EFMI* is the slick, interactive cartoon that previous games of its genre have always aspired to be – it's just that practically all of its notable content is on rails, which hardly constitutes gameplay. Yet, almost perversely, it continues to entertain, despite the aforementioned issues and others too countless to relate here. **Edge** should, of course, explain just why that is the case in depth – but, as Guybrush might say: "Look behind you! A three-headed monkey!"

Edge rating: Five out of ten

Face value

Using an enhanced version of the *Grim Fandango* engine, *Escape From Monkey Island* mixes prerendered backdrops with polygonal characters drawn on the fly. Opinions on its aesthetics will undoubtedly be polarised. Some will enjoy its distinctive, individual style, but others may point out – perhaps rightly – that the cell art of its forebears had rather more character. It does, however, enjoy the distinction of being one of the few games where the transition between FMV cutscene and game engine is not unduly pronounced. Special mention must be made of the facial animation of certain characters, too – Guybrush and Elaine are particularly good, with a convincing range of joke-enhancing expressions.

Banjo-Tooie

Format: **N64** Publisher: **Rareware** Developer: **In-house** Price: **$50 (£35)** Release: **Out now (US) April 2001 (UK)**

Rare has no need for fogging or other distance-masking methods, but the game does judder when the polygons are at their most plentiful

***Banjo-Tooie*'s bosses are surprisingly easy to beat. The final showdown with Gruntilda is over in a matter of minutes**

As Miyamoto-san often asserts, Rare makes great videogames. So he must be the first to sigh aloud whenever the Twycross developer blots its copybook with the likes of *Banjo-Tooie* – a game that, while solid and enjoyable, substitutes shamelessly generic platforming for the sparkling originality of a *GoldenEye* or *Jet Force Gemini*.

Tooie's eight levels are of a similar size and style to Rare's earlier *Donkey Kong 64*; in other words, impressively large, but only too happy to return to the depressingly familiar themes of lava, water, ice, and caves. Like *Banjo-Kazooie*, tests of agility, intellect, and reactions – as well as the usual line up of bad-mannered bosses – reward the bear and bird with jiggies, which are pieces of jigsaw which unlock each successive map. This time, though, Banjo and Kazooie are able to split up, although only at predetermined points, and for disappointingly brief periods.

Banjo-Tooie distances itself from its genremates with a gameworld that's as bursting with character and humour as it is good looking

Even if *Tooie*'s plethora of self-contained minigames, which range from jigsaw puzzles to firstperson shooting sections, threaten to swamp the game proper, for the most part the puzzles and platforming are genuinely involving. Working out how to steal a treasure from a snoozing caveman or carry an obese child to his waiting mother requires a surprising amount of thought, as well as full exploitation of Banjo and Kazooie's roster of more than 40 moves. With Rare refusing to unlock levels until a good number of Jiggies have been won, *Banjo-Tooie*'s cartoony visuals mask a game that's anything but child's play.

As the game progresses, however, it becomes clear just how poorly Rare has handled the ability of the main characters to morph into other shapes. In *Banjo-Kazooie*, the heroes' alter-egos used their swimming, leaping, and flying powers to surmount obstacles or defeat enemies created specially for them. Conversely, in *Banjo-Tooie* all that's usually required of Banjo and Kazooie's dinosaur, submarine, or rock monster forms is to stand on a switch that opens a locked door. As a result, trekking backwards and forwards across levels for shapeshifting purposes seems little more than a cynical attempt to extend the game's lifespan.

Aside from that uncharacteristic flaw,

The underwater world is hardly original, but it demonstrates Rare's capacity for pushing the ageing N64 hardware to its limits. The visual ball is very much back in NCL's court

Chuffy, the steam train, is just one way of traversing *Banjo-Tooie*'s colossal map, although the lengthy cutscenes that accompany it soon begin to grate

Rare's Sabreman character – last seen gracing the humble ZX Spectrum in games such as *Underwurlde* and *Sabre Wulf* – hides in this level, and hints that he may yet be reincarnated as a hero for Gamecube

Rare has again fostered the compulsive qualities that evade most other developers' attempts at 3D platforming. The process of teasing the player with inaccessible areas, then rewarding persistence and puzzle-solving with the very move that allows access to them, is perfectly balanced, while the promise of countless cheats, secret areas, and multiplayer modes as reward for hunting out every last hidden scroll, musical note, Jiggy and Jinjo proves irresistible. With many puzzles spanning interconnecting levels and an assured multiplayer mode, longevity is assured.

Banjo-Tooie also distances itself from its genremates with a gameworld that's as bursting with character and humour as it is downright good looking. From the Pythonesque ranting of a coal monster as you lop off his limbs one by one, to the whistling and frantic waving of the stranded Jinjos, Rare's designers, animators and scriptwriters have fashioned levels and characters that are impossible to dislike – even during the game's most frustrating moments. Kazooie herself is the best of the lot, her acid-tongued observations forever at odds with the bemused inhabitants of the anodyne 3D world.

All told, however, *Tooie*'s slick, involving play isn't enough to exorcise the nagging feeling that Rare is capable of far more, and that the N64 should have graduated beyond *Mario* wannabes in what is now its sixth year. **Edge** hopes that the ribald, 18-certificate exploits of the upcoming *Conker's Bad Fur Day* better demonstrates Rare's capacity for doing things its own way, rather than attempting to do things Miyamoto's.

Edge rating: Seven out of ten

Camera troubles

Reviewers in 1996 naively criticized *Super Mario 64*'s Lakitu-cam – the code for which Nintendo has since patented – little realizing how ineffective rival chase cams would turn out to be. *Banjo-Tooie*'s camera isn't as stubborn as its Rare-designed predecessors, but still feels 'sticky' in response to the rotate controls, and often provides a claustrophobically close view of interiors. At times, it even commits videogaming's ultimate sin – forcing Banjo and Kazooie to walk out of the screen, providing no inkling of what's ahead and forcing you to push left on the stick in order to move the bear and bird to the right.

Sin And Punishment

Format: **Nintendo 64** Publisher: **Treasure** Developer: **In-house** Price: **¥5,800 (£36)** Release: **Out now (Japan) TBC (UK)**

There is a twoplayer option, but sadly this limits itself to dividing the directional and shooting duties between the two joypads, presumably as a help to young gamers

Perhaps the most extraordinary aspect of audacious shoot 'em up specialist Treasure is its ability to continue to inject innovation into the cracks of one of the oldest videogame genres. As with the Saturn's understandably elusive *Radiant Silvergun*, this latest venture (only the third for the N64, after the enjoyable *Yuke Yuke Trouble Makers* and *Bangaioh*), also emerges as one of the host system's best titles.

It's the future. Japan is under threat from the Rufian, a breed of mutant beings that have rebelled against the human race who created them as a way of increasing food production for a world facing starvation. In their way stand the very young Saki Amamiya and Airan Jo, under the ever-watchful eye of telekinetic 13-year-old Achi. Revealing any other plot details would ruin the experience, and despite the odd cliché there are enough twists in the narrative to make it one of the better examples to have recently been implemented in a videogame. Skipping the occasionally lengthy cutscenes is possible, but doing so isn't advisable, given that the game suffers as a result.

Besides, it would only further shorten what is already – by current standards – an uncommonly brief experience. True, the default difficulty level certainly tests the gaming prowess of even the shoot 'em up elite, and the resulting increase in enemy presence, it could be argued, provides a better videogaming experience. Having accumulated continues (you get one for every 100 opponents you gun down) in the early levels, the game gets really tough around two thirds of the way through.

The diversity of the environments and the situations you find yourself in is insanely clever. Visually speaking, this is as accomplished as the kind of product gamers have come to expect from Treasure

From the outset until the very last shot has been fired, Treasure toys with the genre with the genius it alone appears able to implement

One of the remarkable elements of the game is the way it implements a variety of gaming styles

Persistence at the expense of continues should eventually allow further progress, but chances are it'll be game over before the game is over. And yet, starting the adventure from scratch doesn't frustrate – as with all titles of distinction, the compulsive nature of the action makes sure of that.

In the unlikely event of things getting unbearably irritating, or, more likely, implausibly tricky, then lowering the tone may be advisable. Immediately, enemy numbers and certain boss attack sequences go missing. Unless shooters aren't your forte, you should be taking part in the inspired end battle after about an hour of the start.

So why does a game so short score so highly? Think of it as the age-old 'quality not quantity' argument. *Sin And Punishment* continues Treasure's commitment to producing rival-baffling slices of electronic entertainment. The entire thing may be on rails, offering limited amount of freedom – left/right movement (via the C buttons), jump (R, or L for the left-handed), and crosshair analogue control – but the developer offers an experience that eclipses the majority of free-roaming equivalents.

Not that you would necessarily find anything comparable to this, of course. From the outset until the very last frantic shot has been fired, Treasure toys with the shoot 'em up genre with the kind of videogaming genius it alone appears able to implement convincingly. Not only are all the action areas marvellously unique (despite ingeniously maintaining an overall cohesive sense of narrative), but most offer distinct gameplay mechanics, too. Wonder as the game

The odd case of slowdown does make itself shown, but it usually confines itself to huge explosions and is not gameplay threatening

Your gun (which is also a laser sword should baddies get too close) offers an optional lock-on function

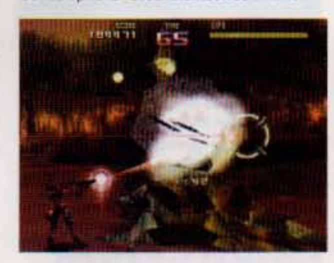
borrows from the shooter subgenre fraternity, piecing together something massively playable, thoroughly relentless, and exhibiting unmistakable charm. Relish, too, the way it does this while remaining remarkably raw in its approach – other than points and health pick-ups, there are no power-ups of any kind. Yet the way it challenges you to determine the course of action required to exterminate some of the more inventive Rufian bosses consistently fools you into thinking something far more complex is at play here.

If there's one appealing factor involved in the acquisition of a Treasure-developed game, it's the assurance that you're getting something wonderfully individualistic. *Sin And Punishment* is no exception.

Edge rating: Eight out of ten

It's a sin

The fact that a Euro release of *Sin And Punishment* looks unlikely is deplorable. Sadly, a US version no longer seems an option, either, given that all details relating to the game have recently been taken off NOA's official Web site. Despite Japanese text, the game remains mostly playable (helpfully speech is in English) – even the bonus options reveal themselves in time.



MotoGP

Format: **PlayStation2** Publisher: **Namco** Developer: **In-house** Price: **¥6,800 (£42)** Release: **Out now (Japan) February 16 (UK)**

Crashing becomes far easier in Simulation mode (top), though a limited amount of setting up pre race is possible even in the Arcade mode

Replay bonus

By far the most impressive aspect of *MotoGP* are the game's replays, which combine unusual levels of attention to detail with a distinct televisual feel. Curb cameras shake as bikes race past, the heli cam barely manages to pick the bikes' engine notes over the din of the rotors, trackside images struggle to keep the action in frame, and on-bike footage makes things look far more exciting than they really are. It still doesn't make the game any more enjoyable, of course.

CPU riders follow the same line and appear unable to make any mistakes, there are only five courses and no weather alterations. The series of challenges (above right) are taken straight out of *Gran Turismo*

Given that a lot of the steering on a motorcycle is done by the rider shifting their weight around, it's actually harder to convey the dynamics of a bike in videogame form than it is those of a car. Maybe it's this increase in handling complexity that has meant the last few attempts at creating realistic bike games have felt somewhat disappointing, or maybe it's the lack of a dedicated controller.

Regardless, having started life as a tedious coin-op, this latest effort was never going to trouble the world of motorbike racing simulation, something which is reflected in the way your bike handles on the track. In Arcade mode, powersliding your way past the apex or pulling wheelies out of corners may read like fun, but in practice it's not enough to pull you out of the trance-inducing experience that *MotoGP* can be as a whole.

However, things get a little more lively if you select the Simulation option, with the bike throwing you violently over the handlebars should you insist on over-doing the throttle as you negotiate bends. This would neither happen as often, nor be as frustrating, had Namco actually bothered to properly implement the analogue button functions, rather than the almost digital on/off nature of the throttle displayed here, making it impossible to tame the power mid-corner. Conversely, the brakes have to be pressed ludicrously hard in order to slow you down convincingly, to the point of bruising your thumb after a full-length race.

In anything other than the hardest difficulty setting, a competent rider will have the rest of the field dealt with by the start of the second lap in any of the five circuits, even after starting from the back of the grid. But, sadly, even a more demanding setting doesn't prevent the competition from failing to behave convincingly, doing a remarkable job of ignoring you while displaying all of the predetermined routines that are usually associated with Namco games.

True, there are plenty of extras (mostly rider photographs) to be opened by undertaking the Championship mode, Time Trial, and a multitude of *Gran Turismo*-like challenges, but frankly the action is too lifeless and artificial to keep anyone but the keenest bike enthusiast genuinely interested in unlocking them.

Edge rating: Five out of ten

Snowboard Heaven

Format: **PlayStation2** Publisher: **Capcom** Developer: **Cave** Price: **¥6,800 (£42)** Release: **Out now (Japan) TBC (UK)**

To the layman, creating a snowboard game ought to be a relatively easy task. You have a hill, you have a character at the top of the hill, you add gravity, and you let nature take its course. It's not that simple, of course, since control, speed, and creativity all need delicate consideration in the design process. Thankfully for would-be powder/plank coders, *Snowboard Heaven* provides a neat illustration of everything that can possibly go wrong.

Nominally more realistic than *SSX* – the terrain is all-too barren, at times absolutely featureless, with nothing like the extravagance that EA's effort offers – *Snowboard Heaven*'s dynamic depends on inertia. This dependence on realism sees the boarders slipping slowly down the mountainside at first, and in order to accelerate you must crouch, achieved by depressing the analogue stick. Reaching top speed takes a painful length of time – literally, since the force required to press the stick into its socket starts to hurt your thumb after a minute or so.

The faux realism is also badly implemented in the handling, which is sticky and unresponsive, as it is in the gravity-defying leaps. Whilst in the air, simple inertia-less tricks and grabs can be achieved, a shadow of those offered by the title's rivals. Rail slides are also possible, but unsatisfying and difficult to achieve. In the end, it's unlikely you'll bother trying, since failure, just like most errors across the unforgiving courses, will lead to your character falling.

Worse still are the character-to-character collisions, often rendered unavoidable since players are offered no way to see what is happening behind them. Since the game is so dependent on inertia, stopping is often fatal to your chances, and when a CPU character has caused that loss of speed by running unintelligently into your back, this soon becomes infuriating and frustrating.

Major flaws all, but there are more, including the lack of any visible reward system and the poor and unimaginative course design. Given the paucity of excellent titles currently available on PlayStation2, *Snowboard Heaven*'s failure should have come as no surprise, but even so, the weaknesses here are shocking. Gamers already have one snowboard heaven in *SSX*. This is as far away from that as is imaginable.

Edge rating: Two out of ten

Snowboard Heaven lifeless and stilted animations fail to produce any sense of urgency

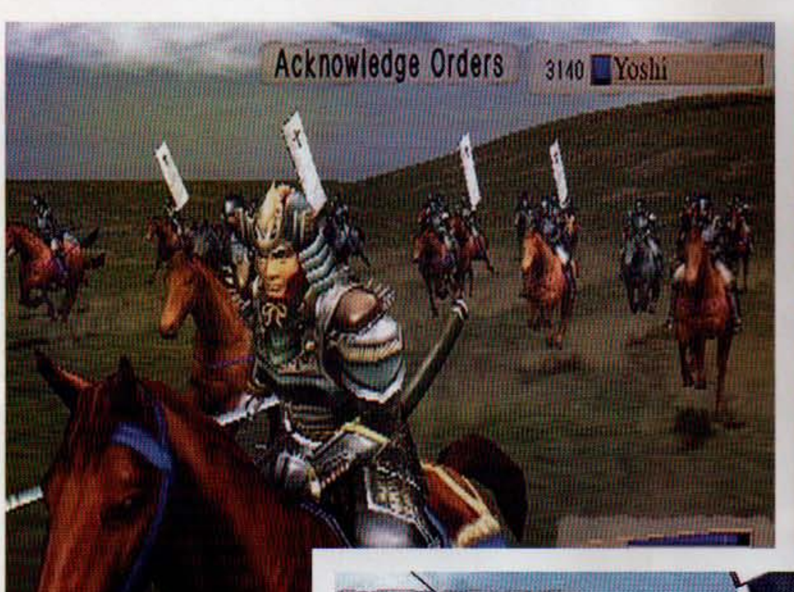
Journeys down the hillside will never fill the player with awe, since the courses are far too sparse and create little sense of speed. Poor shadowing means the board occasionally seems as if it's hovering

Race form

All but the most abysmal software redeems itself in some minor way, and thus it's reasonable to expect to find some positive points within *Snowboard Heaven* too. There are few: like most games, it's reasonably entertaining within twoplayer mode, and some of the graphical touches, particularly in the character design, are fairly cute. Regardless, there's still no justification for owning this, and the fact that its chief rival, *SSX*, is so much better in every single way only emphasises this.

Kessen

Format: **PS2** Publisher: **Electronic Arts** Developer: **Koei** Price: **$50 (£35)** Release: **Out now**



Though the battle scenes are spectacular, with up to 100 men on screen at once, repeated viewings make the player thankful Koei has included a skip button

Focus on FMV

Throughout the conflict, FMV cutscenes keep the plot moving apace. Watching an enemy officer suffer emotional indecision over whether to defect is interesting, but without knowing a great deal about the conflict's historical background, trying to follow every political and emotional twist can be confusing. Key players are introduced and betrayed with each new segment, and the overall effect is disorientating. There's no doubt, though, that the pieces are excellently constructed and are executed with a cinematic quality, albeit with slightly dubious dubbing and facial expressions that sometimes slip into 'Thunderbirds' territory.

Analysing officers, their troops, and their special moves allows the player to tailor tactics according to their army's strong points

Kessen begins with a note from its creator, Kou Shibousawa. He wants you to know that he's done this because he's passionate about it, and he hopes you understand it. Maybe more so than any other game recently, it's clearly a labour of love, which might explain its epic stature and, equally, its limited appeal.

Set at the end of the 16th century in a Japan stricken by infighting, *Kessen* sees you begin by playing would-be (and historically victorious) ruler Tokugawa. Through guile, astute tactics, and brute force, you must outwit his rival Ishida in a manner that, PR-wise, fits neatly into the realtime strategy genre. Actually, it's not that simple, since the pace here is much more sedate and contemplative than the next in the *Command & Conquer* lineage. This is tabletop war gaming: you purchase your lead figures, you paint in their personalities, and then you slide them neatly across the table to their glory or doom. Despite that, it's still a lot more accessible than Koei's previous efforts, shying away from diplomacy and politics, and concentrating its feudal gaze on the battlefield.

The scale, too, is phenomenal. Units consist of thousands of men, rather than the dozens that RTS fans will be used to, and areas of conflict span vast swathes of rolling Japanese countryside. A sense of individuality remains thanks to the officer system. A single nobleman controls each unit, and the player must issue orders to him directly, rather than simply telling his troops what to do. Each officer can be examined through screens of initially incomprehensible data, but their statistics are also apparent in battlefield behaviour. Some are arrogant, some are cautious, some sullen, some dutiful – the player feels pride in those units who've served them well, and mistrust in those whose loyalty is questionable.

In a twist lifted from another genre, units in *Kessen* can also execute special moves, providing their morale is high enough. The devastating impact of these can be watched in realtime, or the player is free to just watch the enemy's numbers fall – more brave warriors reduced to statistics and the roll of a dice. It's a fine accomplishment, a game of mammoth scale and finesse, but whether it's an enjoyable experience depends on how attractive you find the prospect of lethargic 21st century tabletop gaming.

Edge rating: Seven out of ten

American McGee's Alice

Format: **PC** Publisher: **EA** Developer: **Rogue Entertainment** Price: **£30** Release: **Out now**

Having cut his teeth as a level designer at id, American McGee wants his first outing without the assistance of former colleagues to be considered the third chapter of Alice's adventures In Wonderland. It is likely, though, that Lewis Carroll would turn in his grave if this sub-Gaiman inspired substandard platformer were to receive widespread recognition. Utilising the *Quake III* engine should really have allowed one of America's 'gaming gods' to focus on playability and level design. Instead, both seem to have played second fiddle to some admittedly impressive visuals.

The plot, which places Alice's Wonderland in peril as a consequence of her mental ill health, might stem from a particularly American misunderstanding of British literature combined with an adolescent goth streak, but the world depicted in the game is a beautifully stylised one. Bizarrely fragmented chessboards float in kaleidoscopic vortices populated by card guards, while soldier ants and toadstools prove lethal to a miniaturised Alice, as do the impish inhabitants of a hell-like world.

However, the very otherworldy aspect of these environments requires players to experiment with their environment just to find out what is lethal and what is not. Needless to say, frequent saves are the order of the day, to the extent that levels have a staccato rhythm – to the game's detriment. Apart from this, the puzzles are relatively straightforward throughout, albeit of the frustrating sudden-death variety. Largely this is due to lack of imaginative level design, but there is also the significant problem of sluggish and difficult controls. Simple tasks, such as jumping on to platforms, owe a substantial debt to chance. Why it was seen fit, then, to include icy caverns which make negotiating such obstacles even more random is a mystery.

Combat is similarly afflicted by such deficiencies, a fact compounded by a stunningly banal choice of weaponry. From a pack of projectile cards that require all of Alice's magic capacity to overcome the most simple of opponents, to 'dice of summoning', which take an eternity to summon, most encounters are infuriatingly random and dull.

Rarely do videogame developers scale the imaginative and intellectual heights of centuries of literary activity. Unfortunately, *American McGee's Alice* is sad proof of this fact.

Edge rating: Four out of ten

Traditional platform elements such as this underwater sequence are beautifully rendered and imaginative, but sluggish controls and an obsession with level design which rewards mistakes with a quick death undermine the playability of the game. Nevertheless, Wes Craven is rumoured to be directing the movie

Persistence

Alice is a game that rewards persistence. With most of the available weapons capable only of short-range attacks, accurate targeting is immensely difficult, with the result that most battles are a test of endurance. Nowhere is this more obvious than the end-of-level bosses, each of which is overcome by pretty much the same technique; namely, by strafing round them and attacking, stopping only to recover health and ammunition from respawning power-ups. Since most bosses have more than a sturdy constitution, this can take considerable time.

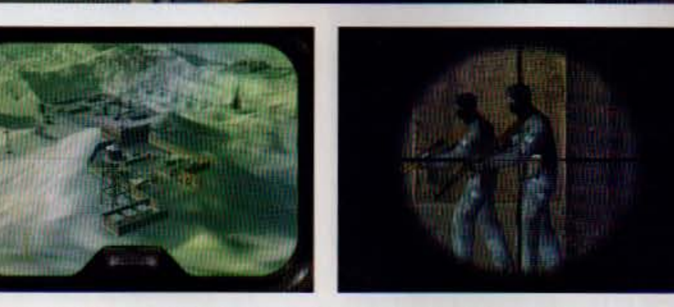
Project IGI

Format: PC Publisher: Eidos Interactive Developer: Innerloop Studios Price: £30 Release: Out now

The memory game

Although at times there are potentially several approaches the player can take to the task at hand, the lack of a quick-save function and overall arbitrariness of the game conspire to discourage risk taking and experimentation. Levels will frequently have to be replayed, but there is little incentive, having invested a considerable amount of time learning the positions of guards en route through the front door of a building, to go back and learn an alternative route.

A number of missions add spice to proceedings, but despite the fact that the game takes place in a number of different locations, there is a similarity to the environments that breeds boredom



The sniper scope and binoculars in the game are capable of zooming over impressive distances, and reconnaissance is crucial, but with the huge environments on offer, there's a lot of walking to be done

Featuring a lone counter-terrorist operative undertaking assignments that require a blend of stealth and action to undermine a shadowy arms-dealing cartel, *Project IGI*, it could be argued, has delusions of *GoldenEye*-esque grandeur, as well as pretensions to realworld accuracy. But from the slightly camp voice actor employed to give character to Jones, the SAS veteran hero, to the unbalanced and inconsistent gameplay, the game never quite hits the target.

Although *Project IGI* is a firstperson shooter at heart, Jones has a repertoire of techniques at his disposal to avoid the very significant dangers posed by firefights, such as scaling fences, sliding down cables, hacking computers and picking locks, for which the viewpoint switches to thirdperson – which is all a bit unnecessary, really, as the switch can be disorientating in the heat of the action. Also at his disposal is a satellite map, though this is consulted at his peril since it is accessed in realtime; although the movement of external sentries is depicted, not so guards standing in buildings or on balconies and the like.

As you would expect, there is an arsenal of realistic weapons, each with accurately modelled ballistics and reload times. Sadly, though, many of the game's triumphs are purely technical achievements, often at the expense of playability. Bullets stray from their intended targets due to kickback, but with only one or two shots proving lethal to Jones, this adds a large element of luck to gunfights, in which he is inevitably outnumbered. Gunfire may be able to penetrate materials depending on thickness, but it is not always obvious to the player what can be shot through and what cannot. There may be some merit in utilising the experience of ex-SAS military advisors, but tied with poor level design, the results can be frustrating.

With AI not so much problematic as non-existent, missions frequently become a test of memory, with enemies appearing in the same places and following the same routines each time a mission is attempted. Consequently there is very little sense of a learning curve, with later missions increasing in length, not difficulty. Ultimately, the result is a feeling of loss of control. *Project IGI* removes a fair amount of skill and technique from the hands of the player, and replaces it with a capriciousness and lack of consistency.

Edge rating: Six out of ten

Delta Force: Land Warrior

Format: **PC** Publisher: **Novalogic** Developer: **In-house** Price: **£30** Release: **Out now**

With the launch of *Land Warrior*, *Delta Force* has undergone a graphical change, but it's still cruder than you'd expect from a new PC release – the voxel technology that marked the previous two *Delta Force* titles may have been reduced to simply handling the expansive landscapes, but the polygon buildings that form the centrepieces of each mission remain ugly and uncomplicated. Character model animations are crude, too – the game is no less entertaining for it, but it's still a disappointment in a curiously misleading FPS. If you view *Land Warrior* as part of the current PC vogue for realistic urban combat simulations, then there's no question that it's a failure. But as an arcade-style game, a pure-bred shooter with *Silent Scope* and *Counter Strike* as its parents, it's enjoyable.

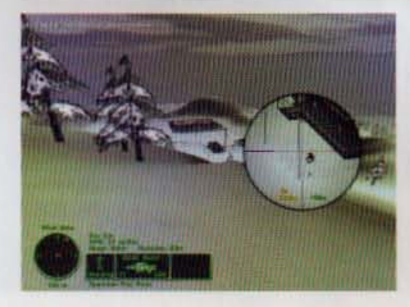
Like many of the firstperson shooters aiming for a more realistic dynamic, *Delta Force* makes you as vulnerable to bullets as your enemies, meaning that one hit from them is often enough to end your game. This principle could lead to the sudden-death syndrome that's a hallmark of so many new PC titles, and to some extent it does. Thankfully, Novalogic has sought out a near-ridiculous partial solution. It has made the enemies really, really stupid.

So, if an enemy does hit you, then you're in trouble, but for the most part they won't because they're comically slow. It looks daft, it reduces the player fear, it takes away any realism that the vast play areas and well-thought-out scenarios might have imported – but it makes it a better game. It's certainly nowhere near the perfect answer, but it's an answer, and when the option is having to suffer more atrocious quicksave-ridden gameplay, that's enough.

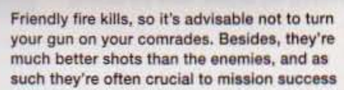
Unfortunately, it also makes the game incredibly easy for those who will insist on saving throughout the mission, and though the option of a campaign structure as well as the instant oneplayer game adds to the longevity, it's still much too short. Multiplayer on Novalogic's online section NovaWorld is also offered; with up to 50 competitors at once, it will doubtless offer more challenging opponents, but it's conceivable that the oneplayer game won't hook enough people into trying it. In an age where *Counter Strike* appears to be the only choice for the online bullet strategist, being young, dumb and full of guns may not suffice.

Edge rating: Six out of ten

Friendly fire kills, so it's advisable not to turn your gun on your comrades. Besides, they're much better shots than the enemies, and as such they're often crucial to mission success



The first mission in the campaign section takes you on holiday to Egypt, where terrorists have overrun the Sphinx. Inside the relic, the action becomes less like *Silent Scope* and more like a slower *TimeSplitters*



Appalling shots

Not only are your CPU-controlled opponents stupid and slow, they're also appalling shots. This serves another (presumably intentional) purpose – the trajectory of their poorly aimed bullets serves to give you a clue as to their location, in much the same way as a red marker points out the terrorists location in *Silent Scope*. Sniping is easy, thus it's possible to be surrounded by huge numbers of randomly misfiring enemies and emerge unscathed. Even given the usefulness of their idiocy, it's still absurd.

007 Racing

Format: **PlayStation** Publisher: **EA** Developer: **In-house** Price: **£30** Release: **Out now**

At least EA has attempted to deliver some variety to the missions. Some will see Bond reaching waypoints, others destroying key targets. None are exciting

Hellfire missiles are launched from either side of Bond's classic Aston Martin. This, however, means that direct hits can only be achieved with frantic adjustments – difficult considering the awful vehicle handling

It is tempting just to take down a thesaurus and list all the synonyms under the heading 'appalling'. Professional courtesy, however, dictates a full and proper analysis.

007 Racing is based on the powerful and dynamic vehicles which have featured in the James Bond films. Unfortunately, the underpowered game engine, basic handling characteristics of the vehicles, and general graphical ineptitudes of the title fail to translate even a modicum of the potency of these vehicles. Missions take place in locations as varied as New York and Mexico, and in EA's defence there has clearly been some effort expended on trying to deliver a variety of objectives. Weapons, health packs, and gadgets can be collected, and the player must use them to either destroy specified fixed targets.

There is some pleasure to be had in dispatching enemies – by laying a trail of oil and watching them plummet into hazards, for instance. But in general the clumsy weapon selection interface combined with lame explosions undermines any enjoyment which might be squeezed out of the game. Another cynical licence trying to cash in on Bond.

Edge rating: Two out of ten

Worms World Party

Format: **Dreamcast** Publisher: **VIE** Developer: **Team 17** Price: **£30** Release: **Out now**

The *Worms* franchise wriggles a little further, then, but fans of the simplistic dynamic will be pleased to note nothing much has changed. Players are provided with a set of four worms and a variety of weaponry. Then, through time-limited, turn-based combat, the objective is to maim and destroy, albeit in a cute tongue-in-cheek manner.

Those who only recall the game from its Amiga debut will note the worms have grown, now standing as more than a pithy collection of pixels, and their arsenal has increased appropriately. There's also a set of oneplayer quests, mostly variations on the kill-'em-all theme, and a selection of skill-building training missions. They're reasonably interesting additions, but do little to change the fact that this is a game which can't be enjoyed without a human opponent.

The online aspect enhances the game, but also serves to show that the real joy in *Worms* is seeing your opponent crumble. The minimalist structure is fleshed out by friendship, which is why it's so entertaining as a multiplayer title. Like an increasing number of games, though, it's a purchase that can't be justified if you only plan to experience the oneplayer side.

Edge rating: Six out of ten

Using the rope requires arcade-quick skills, and failure to time a swing properly can result in a strategic disaster or a watery death

A wide selection of game environments has little impact on the gameplay, but gives *Worms* some visual spark, though those with a phobia of needles might find the medical backdrop a little too distracting

Typing Of The Dead

Format: PC (reviewed), Dreamcast Publisher: Empire Interactive Developer: Sega (Smile Bit) Price: £35 Release: Out now

It is interesting to ponder what the anti-videogame lobby will make of this. With gameplay essentially derived from the legendary *Mavis Beacon* typing tutorial series, the most surprising thing about *Typing Of The Dead* is that it is every bit as enjoyable and satisfying as its lightgun-based progenitor.

Yes, the game contains a series of Practice modes, containing a raft of tutorials and typing drills to improve the speed and accuracy of novice typists, thereby giving the game the appearance of educational software. But the action proper preserves the instant accessibility of the original *House Of The Dead*, with possibly a greater degree of satisfaction stemming from the dexterity required to dispatch the ever-advancing undead hordes. While simply typing words and phrases may seem a bit too much like hard work, the minigames required to overcome end-of-level bosses add spice, while the sheer randomness of phrases like 'shaven ravers' and 'gingivitis bacterium' add humour.

It's difficult not to be sceptical about *Typing Of The Dead* without having played it. But it is all too easy to lose yourself in the quest to become a bona fide 'typing prodigy' once you start.

Edge rating: Seven out of ten

Some of the later stages in the game require the utmost skill and dexterity, with hordes of zombies filling the screen. The phrases you are require to type can be bizarre in the extreme – *Mavis Beacon* it ain't

The end-of-level boss minigames required are inspired, particularly one in which the player has a split second to identify and type the answer to a question

Star Trek: Deep Space Nine – The Fallen

Format: PC Publisher: Simon & Schuster Interactive Developer: The Collective Price: £40 Release: Out now

While the action in the game is hardly hugely challenging, some ambiguous controls do undermine the balance between this and the puzzle element, but three playable characters extends the title's lifespan

Fans of the series will get their kicks simply walking around seeking out familiar faces, which complements the competent game that lies beneath

The Fallen is the latest in a series of games set in the 'Star Trek' universe that is setting an almost worrying trend for actually being quite good. There is enough authenticity in this thirdperson action title to delight 'Star Trek' enthusiasts, but also sufficiently competent gameplay to attract non-Trekkers.

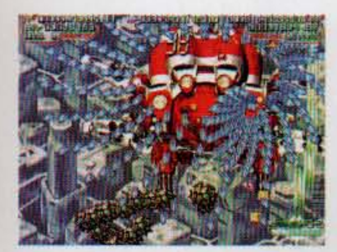
Solid sales are almost guaranteed for this title; three playable characters featuring the voices of original cast members are convincingly rendered by the *Unreal* engine, and there is also the opportunity to interact with familiar races like the Cardassians, or explore surroundings with a tricorder and combadge. Fans of the series may well spend as much time exploring Deep Space Nine as they do on away-team duty.

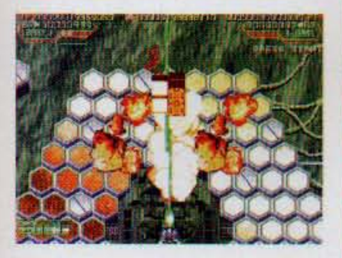
But there is an equally robust game here, too, with missions unique to each playable character extending longevity. Granted, the balance between action and puzzles is slightly off, with puzzles too easy and action too difficult, owing to vague and ambiguous controls, and too many gadgets to manage. A convoluted plot and overlong cutscenes may also be a turn off to non-fans, but while this is no *Elite Forces*, it is, nevertheless, an entertaining title.

Edge rating: Six out of ten

Mars Matrix

Format: **Dreamcast** Publisher: **Capcom** Developer: **Takumi** Price: **¥5,800 (£38)** Release: **Out now (Japan) TBC (UK)**





While it fails to impress visually, sporting low-resolution backgrounds, *Mars Matrix* has gameplay quality to burn

While it may look daunting – and the title does have a steep learning curve – an interesting element in shoot 'em up terms is that you can hit enemy ships without being destroyed. It's the bullets that count

Compared to its predecessor, the Saturn, Dreamcast has been starved of scrolling shooters. In *Mars Matrix* Takumi has gone some way to righting this, incorporating some potent twitch gameplay.

Visually, the game is uninspiring: low-resolution backgrounds will not woo the casual gamer – the ancient *Radiant Silvergun* easily eclipses Takumi's efforts. That said, the game engine is happy to support screenfuls of bullets, and slowdown is rare.

Where *Mars Matrix* shines is in its well-balanced difficulty level: at its default setting, the game is a formidable challenge, and for beginners 'game over' is never far away. However, determination brings slow progress, and mastering the weapon system is key. Along with rapid fire, the player ship is equipped to consume enemy flak for as long as the power bar permits, then discharge it as a screen-wide smart bomb. Additionally, gold blocks from destroyed enemy vehicles can be exchanged for additional lives.

Three play modes, unlockable options and continues, plus the predictable gallery add value, but, ultimately, it will be the hard-boiled gameplay that wins over shoot 'em up stalwarts.

Edge rating: Seven out of ten

Cannon Spike

Format: **Dreamcast** Publisher: **Capcom** Developer: **Capcom/Psikyo** Price: **$30 (£21)** Release: **Out now (US) TBC (UK)**

A collaborative effort from Capcom and Psikyo, *Cannon Spike* delivers instant thrills in the mould of Williams' seminal *Smash TV*, an immediate difference being that the action is viewed from an isometric angle. Characters are recognisable protagonists from the Capcom stable, Megaman and King Arthur included. Both long- and short-ranged attacks can be utilised, and there is a useful lock-on function that enables the player to circle the enemy, facilitating accurate attacks.

On an immediate level, this is a familiar formula: relentless gunfire and much dodging. While hardly innovative, it introduces a satisfying element of bloodlust, especially when coupled with some absurd, yet stunning, pyrotechnics. Screen-wide explosions emanate from virtually every vanquished foe – any excuse for an exaggerated demise has been taken.

However, there is flaw in the length of the game. The ten levels are extensive, but are soon finished on the easiest difficulty setting. Compounding this, all that has been included to avoid shoot 'em up fans feeling shortchanged are two hidden characters, an art gallery, and a low RRP – which doesn't suffice. An enjoyable, curt exercise in arcade blasting, then.

Edge rating: Seven out of ten

While *Cannon Spike* ostensibly adheres to the shoot 'em up formula, a lock-on targeting feature enables the player to circle the enemy before attacking

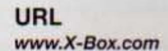
Capcom and Psikyo have worked Sega's hardware to the nth degree in terms of lighting effects. Weapon flare and projectile tracers feature heavily, but the explosions eclipse all with their sheer ferocity

X-Box goes indie

Microsoft's latest proposals should encourage small developers with big ideas

Kevin Bachus, X-Box director of thirdparty relations

The demos were great, but Microsoft is now ensuring that X-Box has the content to make it entrance into the games market successful



URL
www.X-Box.com

Microsoft's remarkable repositioning as the developer's best new friend ironically mirrors the strategy successfully used by Sony to break the power of Nintendo back in the days of the PlayStation. As everybody knows, software sells hardware, and as developers make software ergo surely the best way to sell machines is to get as many developers making games for your console as possible. It's this sort of thinking which is behind Microsoft's recent announcement of two programs to help independent developers get their hands dirty with X-Box.

"I started asking around, trying to understand how independent developers get access to development tools for other consoles. What I found was a confusing set of contradictions," explains **Kevin Bachus**, X-Box's director of thirdparty relations. "So we asked the developers how they thought it should work. We found some needed just enough technical information to be able to prototype an X-Box game on a PC emulating the capabilities of our console. Others needed to build tools and experience X-Box in order to convince a publisher to assign them work. Based on those conversations, we put together the two programs: a set of technical specifications and software tools that would allow developers to prepare prototypes to demonstrate their idea for publishers, and a well-defined mechanism for giving a small group of developers access to actual development kits."

Known as the independent developer program and the incubator program respectively, Bachus hopes that opening up access to X-Box technology will make it easier for developers to create innovative content. "It's difficult even for an experienced team to secure funding on the basis of a great idea," he says. "The independent developer program was designed to give those developers that shot – to allow them to make enough progress so that they can show a publisher what their X-Box game will look like."

The independent developer program is the easier of the two to get accepted on to. Developers just need to show interest in developing a prototype and an indication that its game idea has potential. Microsoft will then provide what it is calling an XPK free of charge. This allows developers to emulate some X-Box functionality for prototyping purposes.

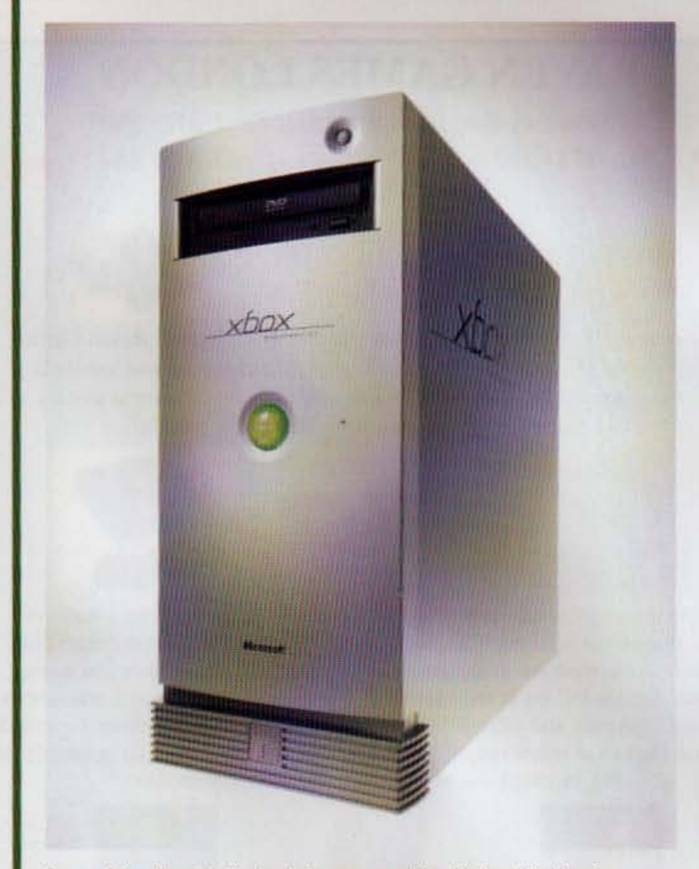
"Initially this consists of the DirectX 8 software development kit and tools that can parse source code to determine where a developer might run into trouble on an XDK – for example, the use of function calls that aren't available on an X-Box," says Bachus. The XPK will typically be run on a PC with an X-Box-style 733MHz Pentium III and a high-spec NVidia graphics processing unit combination. Microsoft won't be supporting the program strongly itself, though. "We will provide community support Web forums, but to some extent the support will be fairly limited compared to what is provided to licensed X-Box developers," confesses Bachus.

The incubator program is a far more serious affair, however. To participate, developers will be required to have their game concept passed by the X-Box team. Even then this will only guarantee a six-month period on the program, and they will still have to buy the expensive X-Box development kit (XDK).

"An XDK is custom hardware – very, very similar to an actual X-Box, but designed to host applications in a software development environment," Bachus explains. Once they have signed up, teams will also have the opportunity to access Microsoft's developer support team and work with its tools and intellectual property, as any other licensed X-Box developer.

Surprisingly, though, content developed through the incubator program isn't required to be X-Box exclusive. "That's a decision we need to leave to the developer and to their publisher," says Bachus. "We hope that by providing access to X-Box tools and support, and by allowing the developer to see what X-Box is capable of, they'll be more inclined to do their best work on X-Box. I suspect that in most cases the design of the games will make it difficult to scale back for other platforms," he adds, ambitiously.

Perhaps it will be most interesting to see the number of incubated games that Microsoft publishes itself. After all, with these two programs it is setting itself up as the industry's de facto talent scout. But Bachus is keen to underline that there will be a level playing field for publishers: "Our firstparty publishing group will have the same access to developers in the program as any other licensed publisher," he argues. "In some cases, they might find a title that catches their eye. But I'm sure they'd evaluate any title presented to them on the basis of its merits rather than on the basis of being part of the incubator program, just as any good publisher should."



Successful applicants to the incubator program will be able to get their hands on the official X-Box development kit – but only if they shell out for it

A new way of C-ing

Accelerate 3D code with CodePlay's new vectorising C compiler, VectorC

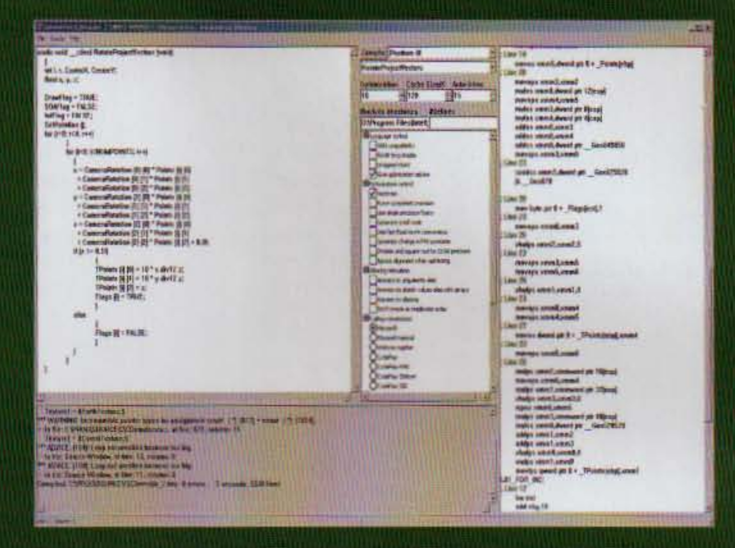
Codeplay MD Andrew Richards (far right) and finance director Adam Slim (right)

Even with the advent of high-level programming languages, the ability to be able to write in assembly code remains a prized skill in the videogame industry. But as the number of lines of code that make up a game continues to grow, the percentage of code that can be hand tweaked is getting smaller. Despite the increase in available power, code is becoming slower and less efficient. Enter CodePlay's VectorC compiler. Designed to automatically generate optimised assembly code for the full range of PC processors, it was born out of one programmer's frustration at the state of compilers while working on Eutechnynx's PlayStation game, *Total Driving*.

"I got really fed up with pop-up and the way PlayStation did things," recalls CodePlay's founder and MD, **Andrew Richards**. "I wrote a lot of code and it went really slowly, so I converted it all to assembly language. With a lot of work you could make the code go really fast. We could draw far into the distance, have eight cars, and full collision detection." But beyond the game, a spark of inspiration had been lit. "I'd had an interest in compilers for a long time and I just thought: 'Compilers should do all of this optimisation'," he says. "I was still doing assembly language, because there was special games hardware and the compiler wasn't written for it."

The major reason, especially in the PC space, is that compilers are mainly written for business programming. Special instruction sets, such as AMD's *3DNow!* and Intel's streaming *SIMS* extensions, are available, but they are not properly supported. "Things like *Microsoft Developer Studio* are written for putting frontends on databases and ecommerce," says Richards. "It's not written for 3D graphics, so all these instructions are useless to most people, so no one ever bothers to add support for compilers."

VectorC is about games, however. "Although VectorC is a C compiler, it's not a Noddy C compiler. It is designed more with an assembly programmer in mind. You can get really good code," Richards stresses. "You can do prefetching and non-temporal stores, which make a big difference." The proof is in the impressive benchmarks gained using it. Richards says his benchmarks see VectorC more than doubling 3D performance for Pentium III and Athlon 700 chips. VectorC's interactive optimiser also gives programmers a clear view of what is happening to their code. By selecting the target processors and choosing which features to support, optimised code is then churned out, with both the source C and the resultant assembly code displayed on the same screen.



The C source code is shown in the window on the left of the screen, while the resulting compiled assembly code is generated in the right-hand window, aiding rapid comparison

VectorC's interactive Optimiser allows programmers to experiment to see the effect of different code optimisations

Debuted at ECTS, Richards was surprised at the level of response to his compiler. "Game programmers are usually the most negative people. I've never seen them like that," he says. "They were so positive."

"The interesting thing was it appealed to all levels of programmers," adds **Adam Slim**, CodePlay's finance director. "There were senior programmers who optimise code and they were thinking: 'Fantastic, this takes the tedium out of what I do'. And there were less-experienced programmers who knew they had to make their code faster, but who didn't know how to do assembly language."

With little game development currently using C, the hard work is just beginning. By the end of 2001, CodePlay expects to have staff of around ten, and to have released versions of VectorC for C++ and game consoles including PlayStation2. "I spent a long time writing PlayStation assembly language, MIPS, so it is ready for PS2 version," Richards says. X-Box is already supported to some degree, thanks to its use of a Pentium III core.

As for the present, "It's quite difficult to change compilers in the middle of a project, so what we are trying to do at the moment is get VectorC to lots of developers and get them evaluating it," explains Richards. Available as a download from the company's Web site, there's a free demo and cutdown version for amateur coders priced at £60. The full version weighs in at £500.

"I don't think we are going to get large volumes of sales until we have a C++ version available," reasons Slim, "but I think we can sell it to pretty much every PlayStation2 developer there is out there, as it really will make their lives so much easier."

URL
www.codePlay.com

Physics with feeling

Climax's *Dyne* vehicle dynamic technology lets gamers go for a spin

Climax Brighton MD Tony Beckwith (right) and technical director Greg Michael (far right)

With physics playing an increasingly important role in the realism of next-generation games, it's surprising that there aren't more dedicated APIs available. Now alongside physics specialists such as *MathEngine* and *Havok* comes a new entrant – Climax Brighton's *Dyne* technology.

"We're releasing *Dyne* because no one out there has a good dynamics engine," says **Tony Beckwith**, MD of Climax Brighton. "We've looked at the competition, and they're just physics engines with some car components. They're not a true solution." One of Climax's three offices, Brighton is the location of the developer's vehicle specialists, who also happen to be working on a number of next-generation racing titles. "We're currently in discussions with a number of thirdparty developers about the licensing of our technology," adds technical director **Greg Michael**.

Dyne – which is the measurement of force needed to accelerate a one gram mass 1cm/s², fact lovers – consists of two components. The core physics simulation deals with all the rigid-body motion and collision detection, while the vehicle dynamics enables developers to model different vehicles using such technicalities as torque curves, gear ratios, and lateral forces. The cross-platform engine had less than auspicious birth, however. "I originally started it for a *Mario Kart*-style game with jumps and ramps," explains **Dr Chris Caulfield**, *Dyne*'s programmer. It was first used in the PlayStation *Mille Miglia* game.

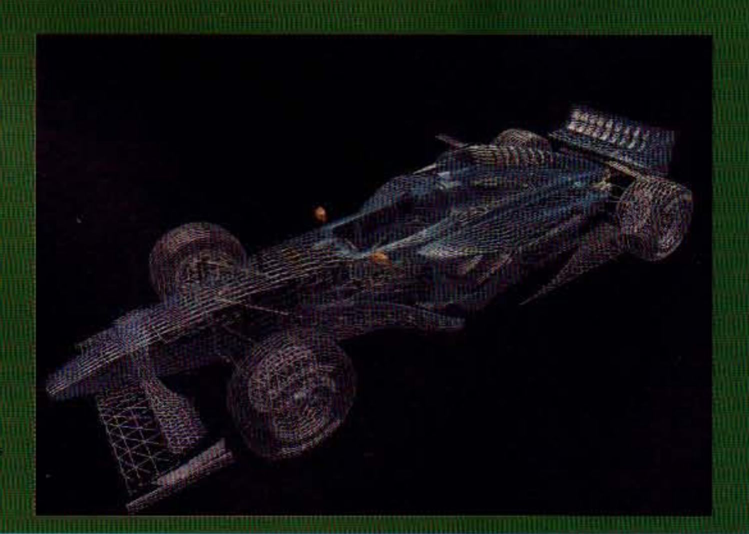
"*Dyne* is a package," says Michael. "You can take the cars and throw them up in the air, drop them, and they react properly. That's the nice thing about our technology. You get a lot of objects behaving naturally, which before had only been done sort of right in game. But *Dyne* is very much geared to be playable as well."

As proved by vanguard games such as *Gran Turismo* and *Colin McRae*, this is the crucial issue. "We feel that gamers are often overlooked as developers rush to implement over-realistic physics models," Caulfield says. "*Dyne* has a powerful simulation core, but its philosophy is to put gameplay and ease of use before realism."

This is accomplished with the use of modifiers to adjust the true physics. "When you come to the crest of a hill too fast in a real car, you'll usually slide off out, whereas what you really want to do in the game is just slide and keep going. You have to dampen down and adjust things," says Michael.

This flexibility also makes it much easier to introduce and set up new vehicles – anything from monster trucks to motorcycles. "The number of wheels is almost irrelevant," Caulfield says. "The driving model is central to the vehicle instead of being distributed to the wheels, which is what I have done in the past. That tends to make cars much more difficult to tweak."

Used in conjunction with Climax's PlayStation2 *MotorSport* engine, *Dyne* is flexible enough to allow development of both track-based and free-roaming racing games



It'd be a challenge of huge proportions in real life, but thanks to *Dyne* at least there's some level of physical reality represented by this Formula One car

URL
www.climax.co.uk

Pucker up

LIPSinc's *Echo* technology generates lip-synching and facial animation on the fly

Three games using *Echo* to automate part of the development are Timeline's PC game, *Timeline*, and EA's PC and PlayStation2 titles *NBA Live 2001* and *Madden NFL 2001* (above)

URL
www.lipsinc.com

Thanks both to the power of processors and the higher standards expected by players, lip-synching and facial animation has become a standard feature of many games. And while it adds realism and increases immersion, it can be very time consuming for development teams already under pressure to meet deadlines.

One solution gaining acceptance is LIPSinc's *Echo* technology. Built on a processor chain that blends animation techniques and signal processing with linguistic rules, it takes a different approach to traditional signal processing algorithms. The core system, called voiceDSP, analyses speech and generates mouth, jaw, and lip positions in three dimensions. Speech, either human or synthetic, is inputted from a digital audio file or direct from a microphone. *Echo* can also recognise the different emphasis in a voice to automatically generate facial movement such as blinking or the raising of eyebrows from the voice input. The output, which can be generated in either flipbook-style, dope sheet, function curve animation data or as a custom format for more complex morphing engines and skeletal systems, is then used to synchronise the character animation and lip-synching with the audio.

An automatic process, LIPSinc has coined the phrase 'drag, drop, done' to emphasis the simplicity of *Echo*, and although that may stretch incredulity a certain amount, it's a quick solution for generating a large amount of lip-synch animations.

Already licensed by EA for PlayStation2 and PC titles, including *Madden NFL 2001* and *NBA Live 2001*, *Echo* will also be used for an as-yet-unnamed online game to generate lip synching for players' avatars in realtime – something that couldn't be done with existing technology.

Another developer to have recently used *Echo* is Michael Crichton's Timeline studio. "We were concerned about the amount of time it was going to take us to create the voice synchronisation for our characters," says vice president of production **Bob Griswold** concerning its *Timeline* game. "When we first heard about *Echo* we were sceptical that it would not be accurate enough to rely upon for all of our character animations, but our concerns were relieved the instant that we tried the tool. *Echo* saved us hundreds of hours in character speech synchronisation time."

Evaluation copies of *Echo*, and the version 1.0, are on LIPSinc's Web site.

The future is open

Indrema's Linux-based dev tools are go

Indrema CEO John Gildred

Not since the days of 3DO, Atari Jaguar, and Amiga CD32 have there been so many game consoles in progress. But while the mass media is firmly fixed on the three-way Nintendo-Sony-Microsoft gangbang, other devices are slipping in under the radar. Few are still holding their breath for VM Labs' Nuon technology, but Indrema's L600 Linux-based console (see **E**92) is relying on the potential of the open-source community to shake up the established game industry. With the Indrema Development Network live online and the first version of the console's SDK available, the push is on.

"The SDK now available is only the 0.3 version," explains Indrema's CEO, **John Gildred**. "So, although it does have differences from general Linux, it also has many similarities. This is actually one of Indrema's main features, because we are not only providing an environment in which many developers are already familiar with, but we are also establishing a standard for the future of game development: a future which we see as being open source."

Currently consisting of the Mesa 3.4 implementation of OpenGL, a recent build of the 3D sound API, OpenAL and Xfree86 version 4.0.1, the SDK (IESDK) will migrate to better optimised versions in 2001. The major improvements to be added include *Xtrema*, which is a version of *Xfree86* optimised for gaming and the OpenStream video API. A deal with Metrowerks has seen a version of its *CodeWarrior* Linux development tools unveiled for the console too.

But, as Gildred points out, the open-source nature of Indrema means that these tools aren't set in stone. "It means that game developers will know exactly what they're developing for, and so will know how to best optimise the software for the system. Also, because our development tools are open source, developers will be able to tweak them to serve their purposes. If they think there's a problem with the SDK, or just something that could be done better for their particular game, they're not forced to work around it as in other platforms. They can just fix it."

The hope is that this free thinking will filter through to game content. "The open-source aspects of the IES have the potential to generate an incredible amount of original content," says Gildred. "It will allow smaller and unproven developers to produce games. It will not only have a large number of games, but it will have a much wider variety of games – eclectic, funky, original games which would never be given a chance on a proprietary console."

As for the obvious question of whether X-Box has stolen Indrema's thunder in terms of creating an easily programmable PC-based console, Gildred is in combative mood. "I think it [X-Box] has validated the notion that a standardised API is something game developers will need more in the future. We want to make sure that standard is not owned by Microsoft, but instead owned by the game developer community."

Indrema's first offering is the L600 open-source Linux-based box, which boasts a package that includes a hard drive, Ethernet connection, DVD playback, and MP3 support

URL

www.indrema.com
idn.indrema.com
indrema.com/iesdk/index.htm/

Open feedback

Early responses to the Indrema SDK 0.3 so far have been positive. "I'm eagerly anticipating versions 0.5 and 0.9, which will make it more specifically an Indrema SDK and less just a Linux graphics SDK," says one post on IDN's mailing list. Another states: "Right now, coming from a developer who has worked a bit with other consoles, I would say development is easier for Indrema than other boxes."

In order to run the SDK, any Linux operating system using kernel 2.2.x can be used, although *Red Hat 7* is recommended. On the hardware side, a 600MHz CPU with 128Mb of RAM and an NVidia GeForce2 GTS graphics card is the recommended setup.

Diary of a videogame

Brain In A Jar presses onwards in the hunt for a new publishing partner

Brain In A Jar diary, part three
by designer Nigel Kershaw

If there's one thing that we've had hammered home to us over the past year, it's that things don't happen quickly in this industry. Sheltering in the safety of big, well-established developers and internal codeshops it is easy for people not to notice this, and even become complacent about the processes involved in getting a game up and running. However, with a bank balance counting down like a time bomb, coupled with everyone's vested interest in the survival of Brain In A Jar, any remnants of 'big company' complacency were soon overshadowed by the enormity of the task ahead of us. Knowing full well how long a deal could take and with no safety net or benevolent parent company to bail us out, it would have been very easy just to have called it a day when Acclaim pulled the plug on *Ferrari 360 Challenge*. But we didn't. This was our one big chance to escape the realms of the wage slave, and we were damned if we were going to let it all go arse over tit now. So we tightened our belts, and went to work.

As mentioned in the previous instalment in **Edge**, we were lucky enough to buy ourselves some time and money by lending some of our technical and art resources to Warthog. This gave us the breathing space in which to pursue the Ferrari licence (wherever it had gone), and to flesh out some new ideas we had tucked up our sleeves. So while just over half our staff were seconded to Warthog in Cheadle, the rest of us concentrated on concept development, demo writing, and publisher hunting.

Matured by our first ride on the deal-signing roller coaster with Acclaim, we were anything but complacent about the intricacies of snaring another publisher. The enormity of doing in two months what had previously taken us nearly a year to achieve was not lost on any of us. While we were armed with a full team, premises, equipment, solid designs, and good coders this time around, we soon realised that these things, which seem so important to those of us actively involved in game development, were only part of the story.

"Knowing full well how long a deal could take, and with no safety net or parent company to bail us out, it would have been easy to call it a day"

Good game design and solid technology, often heralded as the keys to any development deal, are in reality minor parts of the process. In fact, in some cases the design is actually immaterial, and the technology degenerates into just a vehicle for impressing people with a few pretty pictures. Contentious statements, I know, and as a game designer few things irritate me more than seeing people in this industry not giving a monkey's about the content of the games. But the fact is the driving force of this industry is not making games, but making money, and finding people who call the shots who also show a genuine interest in the games themselves is extremely rare. I'm not bitter about this; it's just the way it is.

Knowing this we were able to temper our design document format towards presenting a package that not only put forward the game concept, but also gives more tangible and understandable information that executives can more readily grasp – how much, how long, and how risky. Just having a great idea doesn't cut it any more – a lesson I'm sure that every game designer needs to learn at some point in his or her career.

Two months down the line and our legwork does seem to be paying off. We have generated a lot of interest in our original concepts, as well as potentially attracting a number of licences. Even excluding those publishers who were simply sniffing around in an attempt to take advantage of a company on the rocks, we still have a good number of potential partners to choose from. Our biggest enemy now is time, which has dogged us ever since we parted company with Acclaim, and it is imperative that we ensure that the interval between generating the interest and actually getting someone to sign on the dotted line is as short as possible. We are confident, as ever. If we weren't, then we wouldn't be here, but once the lawyers get their hands on the embryonic contracts things could just grind to a halt. 'It'll all be over by Christmas' was the old chestnut from the trenches, but I hope it will hold true for Brain In A Jar. We just want to do what we are good at – writing games.

Now the smoke has pretty much cleared, I'm confident that at some point in the near future you're going to see a game out there with the Brain In A Jar logo on it, and despite everything we have gone through that's the thing which will make it all worthwhile.

So, what, you may ask, of our Ferrari dream that we spent so long working towards? Suffice it to say that it's over; the Ferrari licence is now out of our grasp. We have a good idea which publisher it went to, but alas our best efforts to get a foot in the door were to no avail. Perhaps our ideas just didn't fit with their 'corporate strategy'; perhaps they just didn't buy into the grand plan that we had nurtured for the franchise. The cynic in me says 'fast buck', but in the interests of not upsetting anyone, I won't say it out loud. After all, at the end of the day, it's all about making money.

Brain In A Jar has just two months in which to find a deal to secure its future

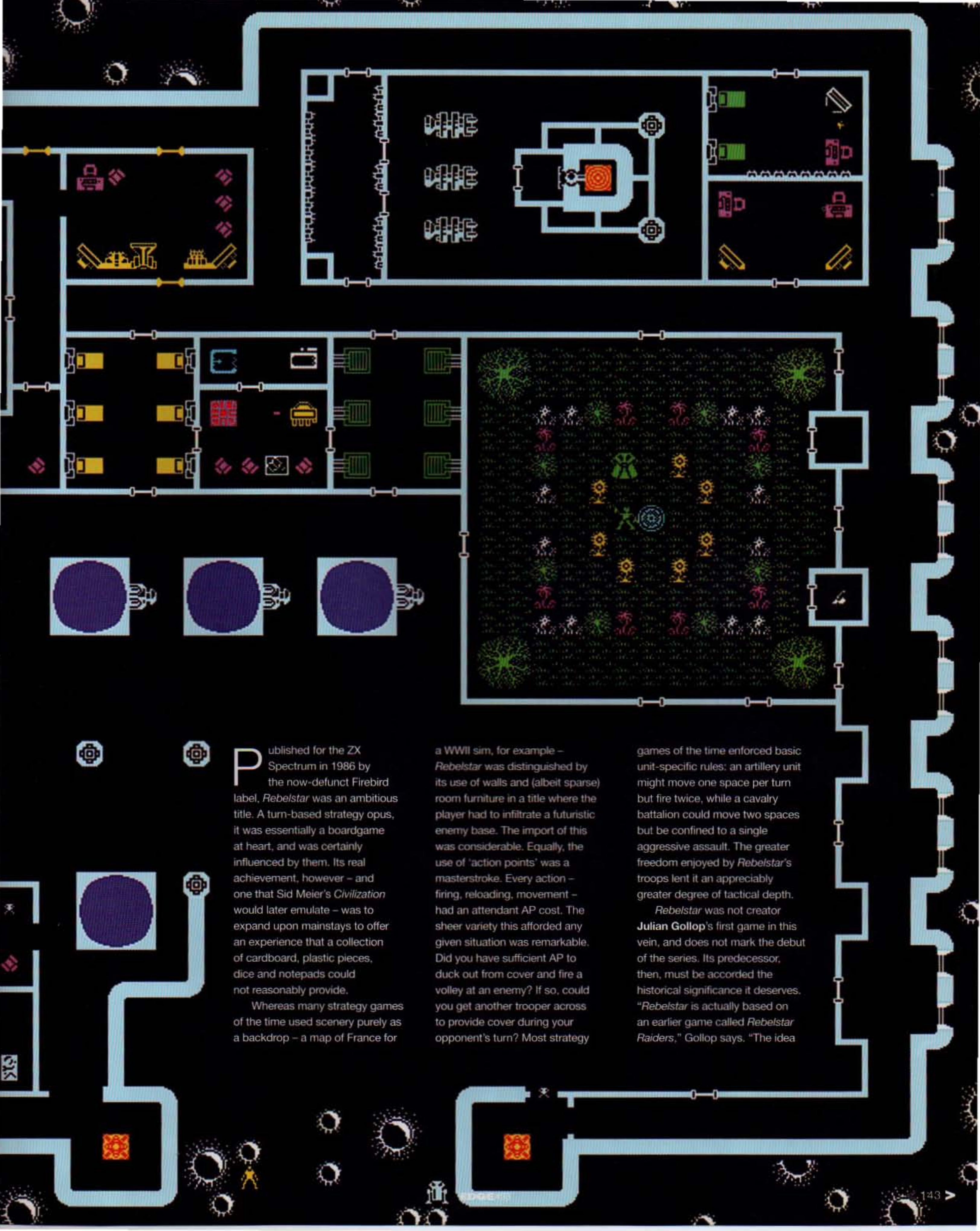
The Codeshop diary now focuses on two projects from two developers. Brain In A Jar's next instalment will be in **E95**

The making of...

Rebelstar

Turn-based strategy innovator Julian Gollop drew his inspiration from boardgames and took their videogame equivalent to a new level. **Edge** finds out how he did it

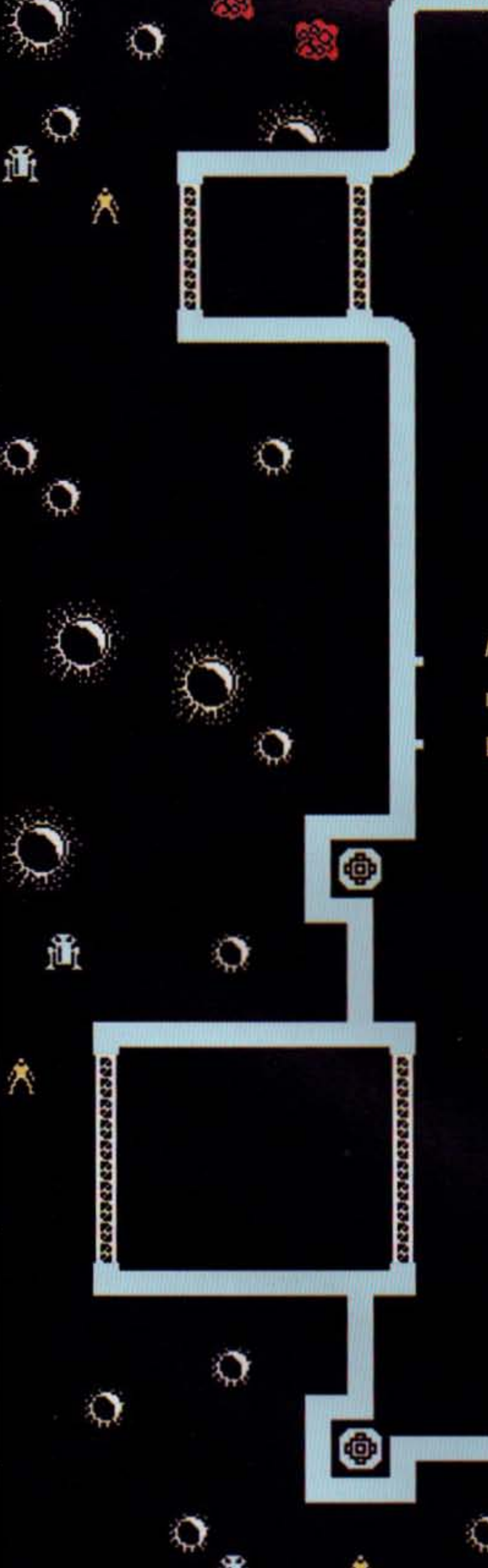
Format: **ZX Spectrum 48K**
Publisher: **Firebird**
Developer: **Julian Gollop**
Origin: **UK**
Original release date: **April 1986**



Published for the ZX Spectrum in 1986 by the now-defunct Firebird label, *Rebelstar* was an ambitious title. A turn-based strategy opus, it was essentially a boardgame at heart, and was certainly influenced by them. Its real achievement, however – and one that Sid Meier's *Civilization* would later emulate – was to expand upon mainstays to offer an experience that a collection of cardboard, plastic pieces, dice and notepads could not reasonably provide.

Whereas many strategy games of the time used scenery purely as a backdrop – a map of France for a WWII sim, for example – *Rebelstar* was distinguished by its use of walls and (albeit sparse) room furniture in a title where the player had to infiltrate a futuristic enemy base. The import of this was considerable. Equally, the use of 'action points' was a masterstroke. Every action – firing, reloading, movement – had an attendant AP cost. The sheer variety this afforded any given situation was remarkable. Did you have sufficient AP to duck out from cover and fire a volley at an enemy? If so, could you get another trooper across to provide cover during your opponent's turn? Most strategy games of the time enforced basic unit-specific rules: an artillery unit might move one space per turn but fire twice, while a cavalry battalion could move two spaces but be confined to a single aggressive assault. The greater freedom enjoyed by *Rebelstar*'s troops lent it an appreciably greater degree of tactical depth.

Rebelstar was not creator **Julian Gollop**'s first game in this vein, and does not mark the debut of the series. Its predecessor, then, must be accorded the historical significance it deserves. "*Rebelstar* is actually based on an earlier game called *Rebelstar Raiders*," Gollop says. "The idea



for the original *Rebelstar Raiders* was to create a complete tactical battle sim, simulating squad-based combat in any genre or era of history, which was a bit ambitious. It was mostly inspired by a boardgame called Sniper. I used to play a lot of boardgames, and wargames in particular, so it was inspired by those."

Rebelstar Raiders, programmed by Gollop before he went to college (and released in 1984 by publisher Red Shift), was the first simplistic implementation of the design brief that has been used in all of his subsequent games. "The original *Rebelstar Raiders* had a singlescreen map, and was a twoplayer game only, written mostly in BASIC" recalls Gollop. "It was a pretty straightforward game, I suppose, even though it had three scenarios. It sold quite a lot, although only in this country. The figures I was told were about 40-50,000, which was good for the time. But I didn't really see any money from it. I was, shall I say, shabbily treated by the guy who was publishing it."

After *Rebelstar Raiders*, Gollop went to college to study economics and sociology. Aged 20, he wrote *Chaos* – another classic singlescreen strategy title – for Games Workshop before beginning work on *Rebelstar*. With a larger, scrolling map, and the inspired introduction of the 'opportunity fire' system, it was an altogether more sophisticated game than its predecessor.

Budget label Firebird was not Gollop's first choice of publisher: "I wasn't really thinking of Firebird. I wanted Mirrorsoft to publish it, but they didn't think it was going to be a good enough game to go on their label. They decided that they wanted it on their Firebird label, so I said okay, fair enough.

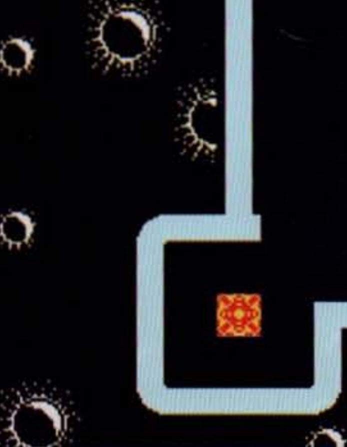
"I suppose I should have gone to another publisher, but at the time I think it was kind of convenient to be with Firebird. They were actually just down the road from me – I was living near Tottenham Court Road, and they were based on New Oxford Street, which was on my way to college.

"I took it to Firebird," he continues, "and at the time it was just a twoplayer game, like *Rebelstar Raiders*. They said: 'No, it has to have a oneplayer mode.' Looking back, it did need a oneplayer version, definitely. It's just that I wasn't sure how to do it. And then I had to do it. All I had was a Spectrum and two Microdrives [notorious tape-based storage peripherals released by Sinclair], and that was my development kit in its entirety. The Microdrives weren't the most reliable of beasties, though. I didn't have much money, being a student, and I seem to remember that I had a selection of five Microdrive cartridges. They could be really unreliable, and three didn't work, so I had to throw them away. Two cartridges was the absolute minimum that I needed to compile the game – I needed to run the compiler from one cartridge, to put the code on to the second. If one of those cartridges had failed, I wouldn't have been able to finish it. I was really hanging on by a thread there – it's really remarkable that I got it done at all."

Rebelstar was distinguished by its use of walls and room furniture. The import of this was considerable. Equally, the use of 'action points' was a masterstroke

Designing AI was a real challenge for Gollop that – with the benefit of hindsight – can be regarded as the catalyst for his later career. "I can remember being in my halls of residence," he says. "I think I stayed in my room for about two weeks solid trying to finish the AI. Everyone was wondering where the hell I'd got to, because all I'd do is come out and eat, then go back in again."

With no prior experience, Gollop laboured to create the requisite oneplayer mode. "I really hadn't a clue to start with," he confides. "The first problem I had to solve was being able to move units around the map. I did that with a routefinding system that I invented – a rather unconventional way of doing things. I remember it relied upon a table. I divided the map up into areas, with units moving from one area to a target area using the table. I also had to design a short-range movement system, and the ability to get around obstacles. That's always the biggest challenge in routefinding, or pathfinding as



it's now called. I had to add various heuristics into the movement, so that certain targets were assigned. It was quite simple: each unit was given a target, based on how close it was, how near it was to the command centre, and a few other considerations."

While Gollop's efforts in creating a oneplayer mode were vital in getting *Rebelstar* published (and, of course, bought and played), it was the introduction of the 'opportunity fire' system that made it truly outstanding. It was a concept that integrated seamlessly with the action points device. If a soldier was left with sufficient AP, he would be able to fire if an enemy unit moved into view. The strategic implications of this were manifold, but, as Gollop candidly admits, it wasn't actually his idea: "It's actually taken from the boardgames I used to play. Although it's not quite implemented in the same way as *Rebelstar* or later games, the concept is one that has been used in a number of boardgames.

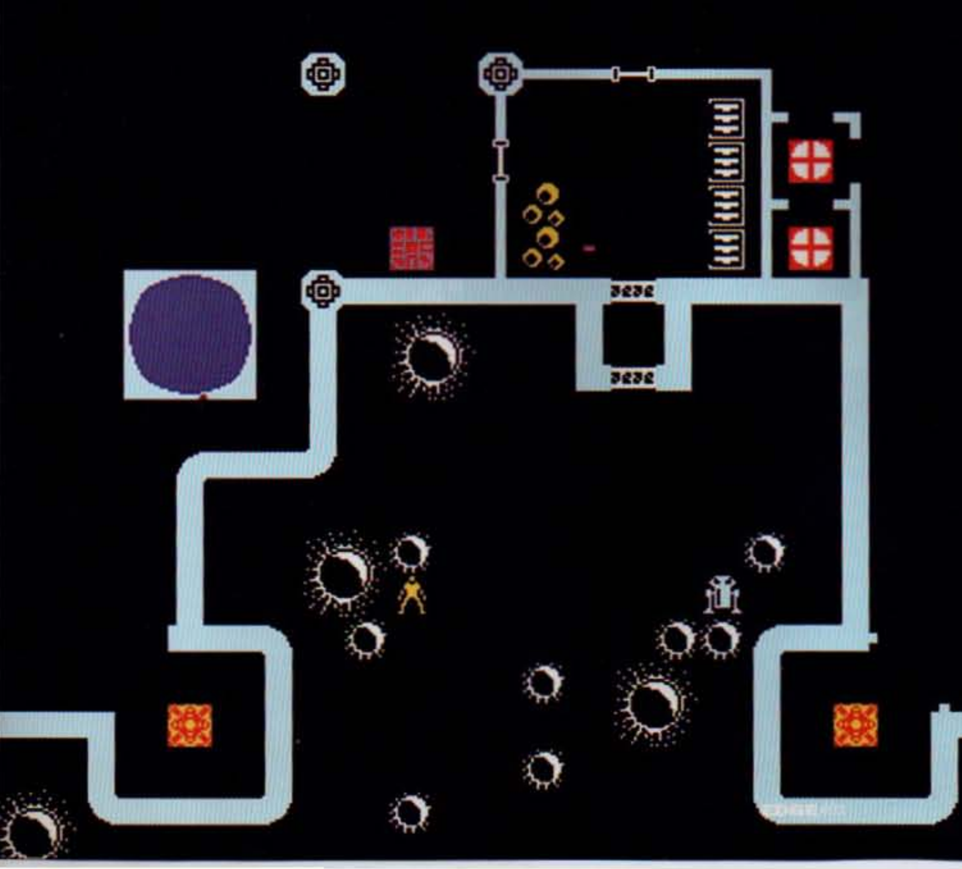
"With Sniper, for example, each player has a little pad where they write down the moves of their soldiers, and plot firing. They can specify a line of fire that, should an enemy unit cross it, their unit will shoot. That's where it comes from. I can't claim it's an original idea."

Gollop's interpretation of the concept, however, was an extremely effective (indeed, vital) aspect of *Rebelstar*. "It had to be included," he stresses. "One of the main anomalies with turn-based games is that you can be covering the end of a corridor and an enemy unit will just move past it during their move. You don't get the chance to shoot it. That doesn't feel right, and it's certainly not realistic – it doesn't make for very good gameplay. But with opportunity fire implemented, it makes things far more interesting. Your tactics become very positional as you cover corridors and such areas, and you have to use cover appropriately. You can shoot down a corridor at a passing enemy, or use opportunity fire to cover a door in anticipation of an enemy unit coming through it. It just makes it more exciting."

Released on a budget label, *Rebelstar* made Gollop a better return than its predecessor: "It seemed to do quite well, because I remember getting quite a bit, even though I was only getting 10p per copy, which is peanuts – or a fraction of a peanut, to be honest. I can't remember how many units it shifted, though."

After leaving college and 'bumming around' for a while, Gollop formed Target Games in 1988, with the intention of publishing his own titles. "I made the decision in 1988 that I was going to do games full time, but maybe that was because I couldn't think of anything else," he laughs. Having finishing *Rebelstar 2* in 1988 (again published by Firebird), Gollop created *Laser Squad*, released on the Spectrum on his own label. This was followed by *Lords Of Chaos* – an update of *Chaos* – before Gollop created his most successful game to date: the excellent *UFO: Enemy Unknown* (also called *X-COM*). Two more *X-COM* titles have since been released, along with *Magic And Mayhem*, his latest to date. Gollop's current project, *Dreamland Chronicles*, will lead on PS2 next Christmas. It would be easy to get the impression that Gollop is his own target audience; that, with each game he creates, he's making it because he wants to play it. As with other industry veterans that have spent many years working with a particular genre – id's John Carmack with firstperson shooters, Origin's erstwhile Richard Garriot with RPGs – a few cynics might accuse him of being a one-trick pony. To do so is to miss an important point: it's the sheer strength of that original idea that allows it to be adulterated and enhanced as technology allows, but still entertain as much as it did so many years ago.

So, while *Rebelstar* was released 14 years ago, you could argue Gollop is still working towards realising his vision.

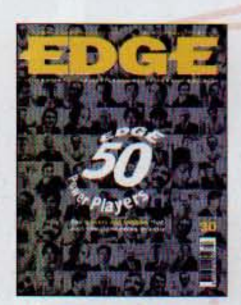


RESET

Where yesterday's gaming goes to have a lie down

reload

Examining gaming history from **Edge**'s perspective, five years ago this month



Issue 30, March 1996

Despite an editorial pointing towards the 'ominous hammering of 64bit' (a hammering not ominous enough for Atari, whose reported demise was illustrated in the news section by a picture of the ill-fated Jaguar), issue 30 still saw the future of interactive entertainment as rather confused. Adverts promised that the Ultra 64 would be worth waiting for, the news section persisted in romantically linking Sega with Matsushita's M2, and even Apple's little Pippin got a mention.

Netview took a disgusted look at gaming Web sites, and questioned 3DO's effort in particular: "The Web is supposed to be educational... Companies like 3DO should, as they say in the States, get with the program."

The prospect of *Virtual On* rearing its mech-faced head in Japanese arcades warranted a two-page interview with Sega AM3, since renamed as Hitmaker.

It is left to **Jeremy Smith** of Core Design, mulling over the prospect of new Nintendo hardware being aimed at eight- to 12-year-olds across the planet, to have the last word on the subject: "Wham! They filled that hole, and I'm convinced it's going to need filling again." Too true, Jeremy, too true...

DID THEY REALLY SAY THAT?
Chris Crawford, creator of *Balance Of Power*, further describes the future of gaming: "Imagine yourself in a hot game. Derek has just made a move on your girlfriend... Things are really cooking."

DID EDGE REALLY SAY THAT?
"American has gloss, Japan has playability, Germany has technical wizardry, but the French have style." **Edge** shows its Francophile side in a preview of Adeline's *Time Commando*.

TESTSCREENS (AND RATINGS)
Toshinden 2 (PS; 7/10), *Total NBA* (PS; 9/10), *Darius Gaiden* (Saturn; 6/10), *Horned Owl* (PS; 5/10), *Defender 2000* (Jaguar; 3/10), *Marathon 2* (Mac; 8/10), *Deathkeep* (3DO; 5/10), *Foes Of All* (3DO; 4/10), *Street Fighter Alpha* (PS; 8/10)

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1. Jeremy Smith tells it like it used to be 2. Minter's *Defender 2000* 'an insult', according to the furious review 3. Fifty industry power players 'that rock the videogame industry' proclaimed the cover feature 4. Apple's Pippin, or an early Dreamcast prototype? 5. *D2*, the flagship title for the stillborn M2 6. *Total NBA*, SCEE's first in-house game, and a 9/10 success

pixelperfect

The industry's favourites from yesteryear. This month, Frontier Developments' **David Braben** talks chip shops and *Defender*

The game's sound effects first drew Braben to *Defender*. He was hooked right from the off

While I was still at school, I was fascinated by computer graphics, and a few games then in the arcades (in '79/'80) were very exciting. I particularly liked Atari's *Battlezone*, and was surprised how compelling such a fundamentally simple game was, but the game I most enjoyed was definitely Williams' *Defender*.

My first sight of Defender was in a chip shop near our school – the sounds were outstanding compared to the usual bleep fare of contemporaries like *Pac-Man*, and the speed of the action was amazing. I was probably hooked before I even played it, and I didn't get to do much of that at 20p a go (yes – a lot for someone still at school, when most others were 10p), but, wonder of wonders, the coin detector failed after the machine had only been there a week or so, and you could get infinite goes for a single 20p payment. It was as if fate made it that way – and many lunchtimes were spent there until, sadly, the machine was fixed.

It was not long after this I got my first computer – an Acorn Atom – and first realised some of the difficulties of getting the performance a game like *Defender* requires, and decided I wanted to write a game of my own.

I finally got to meet the game's creator, Eugene Jarvis, a couple of years ago, which brought it all back.

FAQ

David Doak

Head of design, Free Radical Design

Having finished *TimeSplitters*, any free time **David Doak** had planned to spend on Radical excursions has probably been sacrificed for early design work on the team's next project. However, the former biochemist found the time to answer **Edge**'s questions.

What was the first videogame you played?
Not sure. The earliest arcade session I can remember was with my cousin. We pissed away a serious amount of 10p pieces playing on a *Boot Hill* machine.

What was the first computer/gaming machine you owned?
A *Pong*-type TV console (tennis, football, squash). If you flicked the game select switch to in-between positions you could invent your own games. There was also a difficulty switch which could be used to shrink the other player's paddle.

What was the first thing you ever created for a computer or console?
A very poor version of *Lander* for a ZX81 (which I had borrowed from a mate).

What was your first job in the industry, and what was the first thing you ever designed?
System administrator for Rare Ltd. My first design project was the Rare intranet Web server. After that I just kept my head down and then pretended that I had worked on *GoldenEye* – nobody ever checked, so I got away with it. Easy.

What's your favourite game ever, and why?
Laser Squad, played obsessively on a battered Spectrum with a group of mates in a dreadful student house in Oxford. Quite sad, really. Oh, and *Bomberman*, obviously.

What was the last game you played, and what did you think of it?
Not quite a game, but my current addiction is Lego's Robotics Invention System. Programmable robots for the price of a few videogames – can't go wrong, really, until you start buying all the extra bits. You will also need a patient girlfriend – especially if you go out to buy a dishwasher and come back with more Lego.

How many hours a week do you actually spend playing games?
Varies enormously depending on what's going on, although I doubt that I could manage without some kind of regular fix – outside of work, usually an hour or so daily. If something's actually any good, then it's 4am before you know it.

What's the first game you look for when you walk into an arcade?
A well-maintained quality pinball machine – preferably in some quiet dark corner where you can appreciate it properly and settle down for a serious binge.

What's your favourite movie, book, album, and film of all time?
Movie: 'The Maltese Falcon'
Book: 'Gravity's Rainbow' – Thomas Pynchon
Album: 'Kind of Blue' – Miles Davis
Film: The new Advanced Picture stuff, because it's impossible to resist using the panoramic setting even when it's entirely inappropriate. I'm surprised you didn't ask about my favourite novel or record.

Which Web site do you most regularly visit?
I try not to regularly visit Web sites as they are mostly badly designed and often full of annoying drivel and banner ads.

"The most satisfying thing is making something which entertains other people. Also, I get to work with talented, creative people"

What game would you most like to have worked on?
Maybe a Sega arcade driving game or one of the *Zelda* series. I'd be more motivated by an interest in how those kind of development teams work than by the actual product, although I wouldn't like to work on something which was too big to make a significant contribution to.

Of all the games you've been involved with in the past, what's your favourite, and why?
Out of all three, it would be *GoldenEye*. It was a great privilege to be part of a first time development team who were making it up as they went along. There were serious doubts about what we were up to, but we had the last laugh when it was released – well, almost the last laugh, for the money had yet to be counted out.

What new development in videogames would you most like to see?
Less inane hype about hardware and more attention to the games.

What annoys you about the industry?
All the parasites who squander other people's talent through their inept decisions. All the idiots who know nothing about games or technology and believe whatever they're told. All the fools who make up stuff to tell the idiots – especially the ones who ought to know better.

What do you enjoy most about working in the videogame industry?
For me the most satisfying thing is making something which entertains other people. Also, I get to work with very talented and creative people who are somehow blind to the fact that I am not one of them.

Whose work do you most admire?
I suspect that I don't actually know the names of the people responsible for the things I've really admired in games – it's not an industry renowned for attributing credit where it is due.

What new platform are you most looking forward to?
One which is part of an efficient and reliable railway network.

What's your take on mobile phone gaming?
Here's a good mobile phone game – next time someone's stupid customised ring tone goes off, grab their phone and shove it up their arse.

Finally, synthesis or persistence?
No, I'm sorry, that's just a stupid question, and I think someone ought to say so.

inbox

Communicate by post:
Letters, **Edge**, 30 Monmouth Street, Bath BA1 2BW
Or email:
edge@futurenet.co.uk

This probably isn't news to you but I have today encountered what I believe to be a first in videogame history: a triple-A title that is so bugged as to be unplayable. To the sound of wilting fanfares I call *Metropolis Street Racer* to take the stage.

At first the quirks and anomalies – the odd sound artifact, a chapter opening up a few points short of the requirement – are barely discernible (hence the generous reviews). You let it slide. I mean, after all, it's a ravishing drive. Then suddenly the whole thing collapses, with chapters opening up all over the place unbidden and undeserved; thousands of points being awarded left and right for every left and right. If, in a fit of pique, I hadn't hurled my disc into the rain-sodden streets I could've completed the thing driving an Austin Maestro in reverse trailing a ton of railings festooned with impaled programmers...

But seriously. How can this happen? A flagship title in a billion-dollar industry. Can you imagine a Spielberg movie going out with scenes missing? 'Jurassic Park' with empty spaces where the dinosaurs should be? Because that would be the movie equivalent. And it's unthinkable.

Sega, who confirm that *MSR* is bugged and are to be offering a 'patched' version in December, should be ashamed of themselves. Their unprofessionalism is breathtaking. This, on the eve of PS2's European launch? I have long been a staunch defender of the Dreamcast but this new fiasco is fatal, I feel. It stinks of shoddy management, fumbling panic and a miserable indifference to the people who make this business possible: the gamer.

Doubtless, Bizarre Creations must take some of the blame. *MSR* is literally years late and Sega need it badly. But if a game's not finished, it's not finished. If I'm late in the morning I don't just get up and get on the Tube wearing only my socks and gloves. To do so would merely invite public and professional derision.

Sega must stand naked and alone. And boy oh boy is it cold outside...

Jake, via email

Edge's review copy was not in this state, although it's certainly true that the very first production run of MSR GD-ROMs contained significant bugs. You're not wrong, though: releasing an untested game does smack of desperation.

The 'CD underground' article in **E**91 made interesting reading.

At issue is copyright theft of digital 'works', or, in summary, the theft of large binary numbers. However, we are asked to 'respect' the need for ownership of these binary numbers by the publishers. The trouble is, they don't help their own cause. I have often forked out my dosh for a large binary number that ultimately is non-functional. I have forsaken my rights in doing so by opening the plastic wrapping. I have to pay through the nose for technical support. The Web support sites are often a sham. Usenet (which is free) is often vastly better. One starts to feel that the legitimate deal is rotten.

Obtaining pirated binary numbers provides entirely the same product, with the same lack of technical support and the same risk of software failure, but at a vastly reduced price. Go figure.

As long as the product is exclusively the binary number, the publishers are on a hiding to nothing. Examine the MP3 issue. Digital copyright theft is getting easier everyday. Asking for 'respect' will not work. But providing value that extends beyond just the binary number will work.

David Crookes, via email

Interesting surname there, David.

I just had to write in to tell you my opinion of the PS2. I was one of the lucky 165,000 Britons to pick up my PS2 on launch day (I traded my DC against it). To begin with, however, I was very disappointed. The visuals don't seem to be very high resolution – thought the PS2 had a max res of 1280x1024, but it seems more like 640x480.

What is more worrying is that my PII Voodoo 2-powered PC running *Unreal Tourny* looks hugely more advanced than *TimeSplitters* on my PS2. I know that *TimeSplitters* is bare due to its fourplayer nature, and I wouldn't mind except for some of the terrible flickering and aliasing problems that plague it. I did a side-by-side comparison of N64 *GoldenEye* and PS2 *TimeSplitters*, and to my dismay Rare's game looks much more stable, and features far better explosion effects. TimeSplitters simply looks very raw compared to *Unreal* or *GoldenEye*. The only games that feature PC/DC-beating visuals are *GT3* and *TTT* (some of Namco's lighting effects, in particular, are unbelievable).

Do you know whether there will be a VGA monitor cable for the PS2? *Soul Calibur* looked so much better on a monitor than on a TV when I had my DC; I want to see *TTT* and *GT3* in the same format. Also, do you know what the maximum resolution of a TV display is? Is it 640x480?

Anyway, I'm reasonably pleased with my PS2. It does have a bright future, just not as rosy as it seemed back on March 2, 1999.

Darryl Reubens, via email

The standard PAL TV resolution is 640x512 interlaced (including borders at the top and

At the time of going to press Sega pledged to begin replacing buggy copies of *MSR* from December 11. One reader has already thrown his into the street

Mat Taylor requests more coverage of the handheld gaming scene in **Edge**. His demands will be met when Game Boy Advance arrives in 2001

bottom), so in effect you only really see 640x480. To achieve a higher resolution would require a monitor and VGA output. It's currently unclear whether or not PS2 is compatible in this fashion.

Theoretically, HDTVs provide support for a much higher resolution, but PS2's VRAM presents problems in this regard – there's simply not enough of it to effectively handle the visual component.

So Neil Armstrong [inbox, E92] feels cheated that the Microsoft millions have stolen a game away from the PS2 [*Munch's Oddysee*]?

I'm sure he was also having sleepless nights when Sony were out strong-arming thirdparty developers and paying them not to make Dreamcast games. EA and Codemasters spring immediately to mind – the latter suddenly canned a 90%-complete version of *Colin McRae 2.0* for Dreamcast. Coincidentally, this title is one that sells systems, and is not in development for PS2.

It's ironic that a PS2 owner is now bemoaning the fact that a faceless corporation with a lot of money and a machine with unproven specs that is months from release is stealing PS2's thunder, and more importantly, their games.

James Woodhead, via email

Has anyone really stopped and thought the X-Box through? What is the point of packaging a 733MHz Intel x86 processor with an NVidia graphics chip, 64Mb RAM and an 8Gb HD? By the time this machine is released it will be the equivalent of a low-range PC. Okay, it will be somewhat cheaper, but it won't have the same feature set as a normal PC, either. Does it make sense to base a new machine around what is essentially a 30-year-old processor? The topping on the cake is DirectX. Now, personally, I don't mind DirectX that much, but it cannot be the best way of getting performance out of the hardware on which it will run. Wouldn't it be better to use an NVidia equivalent of Glide or PowerSGL? This machine is going up against hardware like PS2 which has a brand spanking new custom-built CPU and is designed to push millions of polys around. My PC at the moment has a 900MHz CPU, 256Mb RAM, 64Mb NVidia GeForce2 GTS and 30Gb HD, and in a year it may well have a new CPU or graphics card in there. Now, I did not spend a great deal of money in building this system (build it I did) and the most expensive part of it was the NVidia graphics card, but I expect it to last me until the X-Box comes out. Will X-Box using DirectX mean that porting software to the PC will be a doddle? I fully expect to be able to play most X-Box titles on my PC because of this (security/piracy issues aside). So will the X-Box end up being the cheap equivalent of an underpowered PC and, if so, how will it compare to GameCube, etc? Who will want to buy an X-Box when if you really want to play games you can purchase an NVidia upgrade for your PC or buy a PS2 (roughly the same cost as each other)? Can you guys clear this up for me?

David Fowkes, via email

X-Box's value lies in its very existence as a console, not an evolving, unwieldy computer. DirectX was elected because it is the most commonly used API, which leads to happy coders, and a big bunch of names on Microsoft's developer partnership list – and that's good PR. Regarding dual PC-and-X-Box releases, expect a considerable number.

I am concerned that **Edge** might have unwillingly positioned itself so that it is unable to report on the next big gaming revolution. I am talking about handhelds – GBA, Wonderswan Color, that Ericsson/Lynx thing, WAP, etc. Many industry types are expecting this to be the next mass market for gaming – perhaps on a scale never seen before, but **Edge** might not be there. By setting out your stall as being on the cutting edge of new technology, these 8- or 16bit, relatively low-tech devices do not fall within your chosen arena.

I can understand that a WAP screen will not blow up well into a glossy half-page screenshot, but you need to find some way of reporting on this sector. A passing reference in the news section will just not cut the mustard for much longer.

Where else other than **Edge** would I get an honest reliable and accurate review? At present if I want a GBC review I also get a free Pokémon lolly with the magazine and the informed opinion that every game is 'brill'.

If PS2 has a lean first year you might need something to fill in the gaps until the next, next generation comes along in the Autumn.

Mat Taylor, via email

Edge's content will reflect the emergence of new handheld technology – you'll certainly be seeing GBA titles within these pages in the future. As for mobile phone games, though…

I am very troubled about the future of wireless gaming with regard to mobile phones. There are several aspects of this new industry which make me believe that it will not be the success that many multinational companies hope it will. When the slow introduction of these multiplayer mobile phone games begins, gamers should remember that the Game Boy Advance will allow several players in one game using a phone adaptor – without moving

'I'm sure Neil Armstrong was also having sleepless nights when Sony was out strong-arming thirdparty developers and paying them to drop Dreamcast'

An anonymous reader blasts new mobile phone tech, such as Ericsson's R380s, fearing it will hold gaming back

back about 20 years in terms of graphics and sound, which will happen if small LCD screens and poor-quality sound are forced on the public again.

Who is going to be the target consumer for these phones anyway? The only two scenarios I can imagine are those little annoying kids we all know with rich parents who buy the latest product just because these spoiled children need to have their love bought, or well-off business people who are convinced they need to buy a phone with games because, "... erm... because it's... er... the latest in communication, sir." Don't believe the sales assistants! It's best to keep portable games on portable games consoles à la Game Boy Advance and keep communication devices for... er... communication!

Anonymous, via email

The statement made in the **E**92 article 'Missing in action' that Tony Crowther is 'unique among programmers' in having released product on six different platforms is wrong. I have released games on eight platforms (C64, Nintendo 8bit, SNES, N64, Amiga, Atari ST, PC, PSX), and I expect that many other programmers will have had the same variety of industry experience (though very few will have had as many hits as Tony, and that definitely includes me).

Since I started writing videogames in 1985 a lot of platforms have been and gone. I can see no reason for this situation to change in the near future; platforms may hang around a bit longer now (though Sega have yet to prove that the Dreamcast will avoid being extremely short-lived), but a career in videogames may easily span 20 or 30 years and programmers have to be flexible in order to keep up with the ever-changing hardware environment.

It is an extremely valuable skill to be able to produce game demos on a new platform within a few weeks of receiving the development kit, and though it is restricting to have to 'master fundamentally new technology' every project or two, it is also exciting to get that new kit on the desk and to start pushing it to see what it can do.

At the heart of it, programming is just assignments and conditionals; equally, new consoles are just a different set of I/O protocols and occasionally a new processor which helps reduce the CPU load. This attitude has helped keep me productive during the last 15 years, and I expect to keep developing new games, on new consoles, for the next 15 years, too.

Peter Baron, via email

I am a gamer, therefore I am a customer. I would like to ask Sony to put its money where its mouth is and 'go create' proper customer service. The evidence:

1. The preorder system. I rest my case.

2. There is no technical reason behind needing a PSone memory card for PSone games and a PS2 memory card for PS2 games. Apart from increasing the sale of memory cards.

3. It takes an age to get through to their customer service helpline. Hey, 60 pence a minute to find out about the problem with the memory card is a lot more profitable than a simple FAQ section on their maze of a Web site.

Gamers are customers yet we have to put up with: games that are not properly tested, slippage, useless after-sales service, naff preorder systems, overcrowded trains, and tasteless stuffed crust pizzas. All in the name of shareholder value, of course, and great games like *Perfect Dark*, *Deus Ex*, *Half-Life*, *Vagrant Story*, *Soul Calibur*, *Unreal Tournament*, *Myth II* and *TimeSplitters*. Actually, maybe life ain't so bad, after all...

While I'm here, I have to say that hardware wars are really boring. I've seen the Atari 2600 vs Intellivision, Spectrum vs C64, Atari vs Amiga, NES vs Master System, SNES vs Mega Drive, PS vs Saturn vs N64, console vs PC, Pikachu vs Meow, Britney vs Christina. For all you master debaters ou[t] there, try debating over this: a night with Britney and Christina vs a free lifetime supply of consoles, computers and games.

Can't wait for X-Box vs PS2 vs GameCube. The[y] all have one in thing common: a sense of déjà vu.

Donato Piccinno, via email

I've been reading your mag for a few years now, and have been a devoted follower (this is irony), but I just wanted to ask something: is there any chance that **Edge** could drop all this 'videogamer's bible' hyperbole?

What was always fantastic about the mag was its unbiased view of the industry, where others would fall on their sword for an inferior system. With the current attitude, though, **Edge** is dangerously close to pretentiousness – if gamers really do consider your magazine to be such a tome (and the world 'bible' in itself is approaching religious considerations of dedication), then do they really need to be told it?

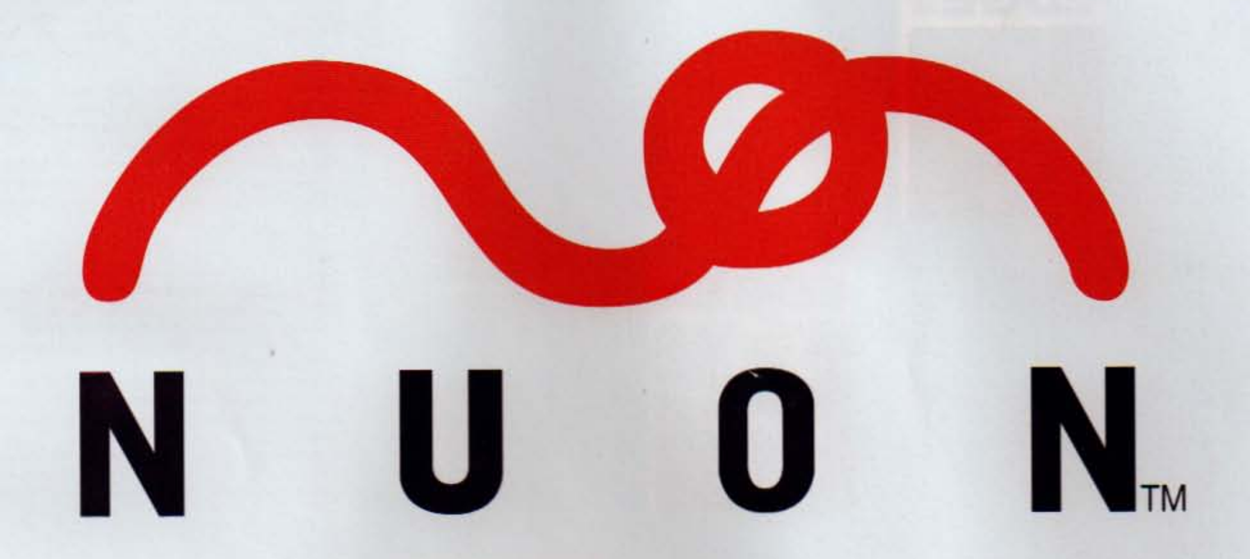
These are just my thoughts. If you really want to put **Edge**'s status into perspective, would the editor of the *other* famous bible really consider listening to such insolence?

Lee Hyde, via email

What, he edited it as well as being the lead character in it? That's some going.

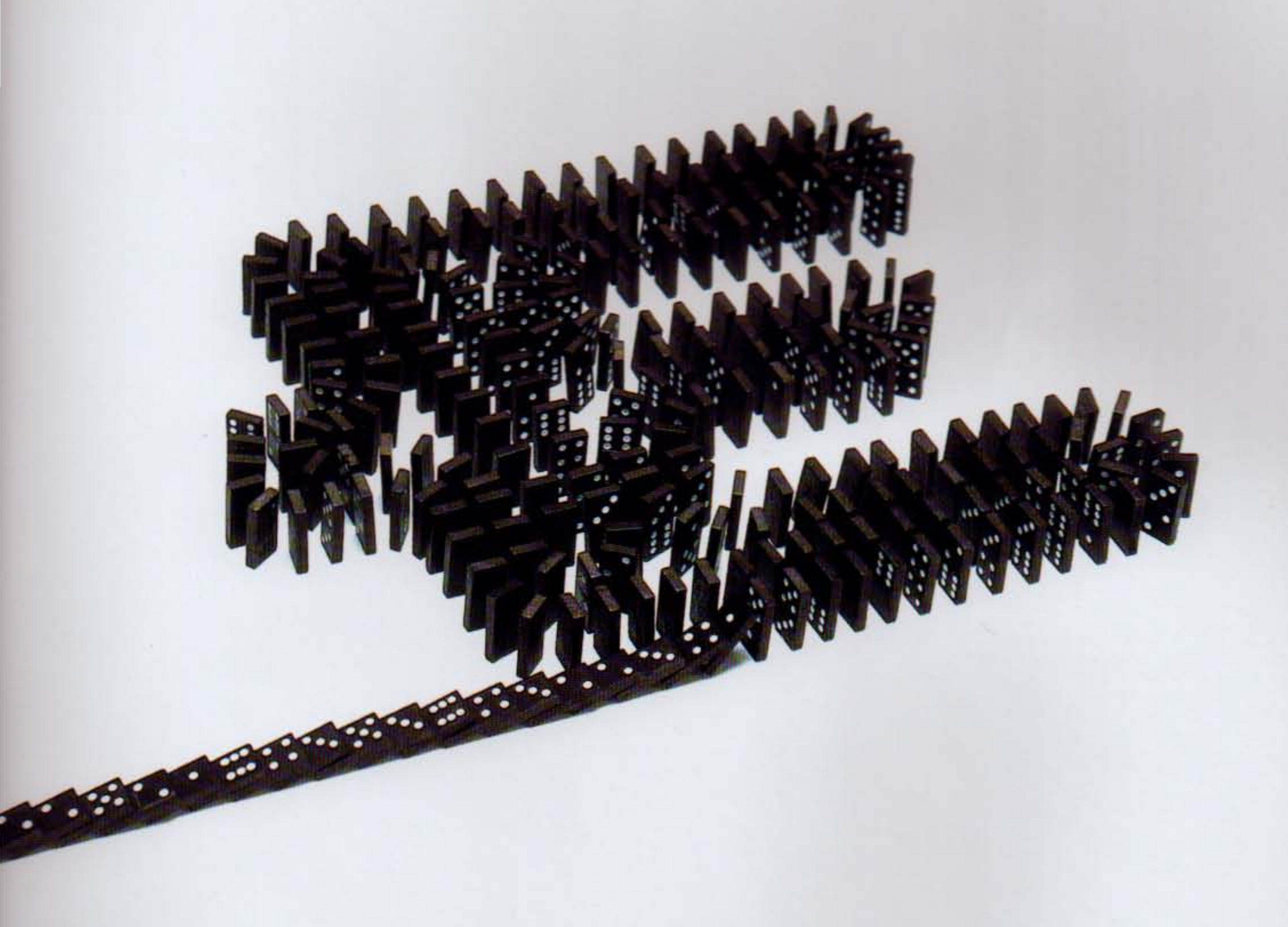
'Just my thoughts, but if you really want to put **Edge**'s status into perspective, would the editor of the *other* famous bible really consider listening to such insolence?'

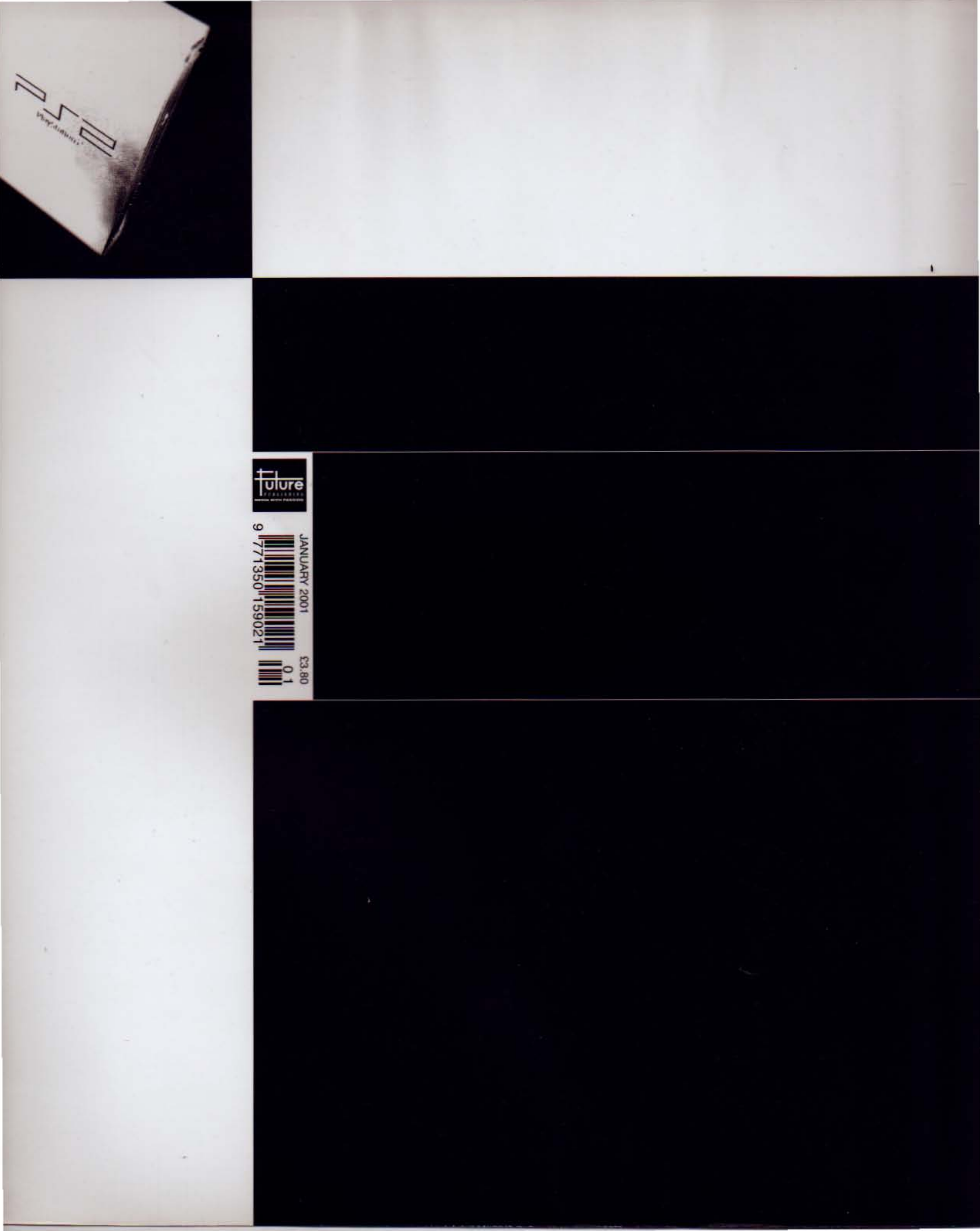
Losing faith in Sony, Donato Piccinno believes there is no technical reason for PlayStation2 requiring its own, specific type of memory card



Next month: the hardware that time forgot

What happened to VM Labs' entry in the electronic entertainment arms race? And what's Jeff Minter been doing with it all this time? **E**94 delivers all the answers

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